



# FWF Update Newsletter

Department of Forestry, Wildlife and Fisheries

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Website: <http://fwf.ag.utk.edu>

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## Tennessee Healthy Hardwoods Field Days Announced

*The theme is "Income Opportunities for Your Forest."*

### Dates and Locations:

- May 2 at Chickasaw State Forest, Henderson
- May 30 at UT Forest Resources Center, Oak Ridge



### Registration:

There is no fee associated with attending the Tennessee Healthy Hardwoods field days. Please register in advance for meal purposes (but walk-ins are welcome). To register, call the Tennessee Forestry Association office in Nashville at (800) 893-7403. State the location you will be attending, the number in your party, plus your address and phone number. You can also print a brochure and register on-line at <http://www.tnforestry.com/healthyhardwoods.htm>. This program has been approved for 3.5 CFE credits.

## Estate Planning For Forest Landowners

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Larry Tankersley, Extension Forester

Effective estate planning is an ongoing process consisting of three major components. The first concerns effective management of estate assets during the owner's lifetime. The second component, building on the first, is concerned with ensuring that the transfer of estate assets at death will be made in accordance with the owner's wishes, with a minimum of problems and minimum tax liability. The third component encompasses **nontax** issues that can only be addressed while living, through personal understanding of family circumstances and their interaction with effective planning. Just a few things to consider:

I know what estate planning can accomplish, and have set objectives for my own estate plan and have discussed a plan for continued management of the family's timberland with the family.

I understand the various ways to hold timber property in my estate and the advantages and/or disadvantages of each.

Do you and your spouse have complete and up-to-date wills?

I know how much family income will be received from the timberland, retirement plans, social security and other sources.

My spouse and I know how to contact our attorney, accountant, banking officer, life insurance agent and forester. We both know where important documents are stored.

How many times did you say yes, no, or what?

( This information is from a new Forest Service publication, *Estate Planning for Forest Landowners: What will become of your timberland?* See article below) There is lots of information available to forest owners regarding Estate planning, let us know if we can help.

## Newly Released Estate Tax Planning Guide

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Larry Tankersley, Extension Forester

The USDA Forest Service Southern Research Station and its collaborators recently released the estate tax planning guide titled "Estate Tax Planning: What Will Become of Your Timberland?" This is the updated version of one of the most widely used tax publications for private family forest owners. The electronic version is available free at: [http://www.srs.fs.usda.gov/pubs/gtr/gtr\\_srs112.pdf](http://www.srs.fs.usda.gov/pubs/gtr/gtr_srs112.pdf).

The publication contains 180 pages of practical estate planning techniques and estate tax laws and rules with many examples and applications specifically for woodland property. It is written to assist woodland owners and their advisors—attorneys, consulting foresters, tax preparers, financial planners, as well as state agency foresters and cooperative extension agents.

For more information contact Linda Wang at [lwang@fs.fed.us](mailto:lwang@fs.fed.us) or (404)272-4791, or Neal Bungard at [nbungard@fs.fed.us](mailto:nbungard@fs.fed.us) or 603-868-7719, or John Greene [jgreene01@fs.fed.us](mailto:jgreene01@fs.fed.us) or (504) 589-7130.

## New Publication on Timber Inventory

David Mercker, Extension Specialist, Forestry

A new publication is available for loggers, foresters and advanced landowners that describes the purpose and process of conducting a timber inventory. It serves as an introduction to the terminology and methodology of timber inventory, allowing non-professionals to communicate effectively with forestry professionals regarding timber inventories. The reader is not expected to have any prior knowledge of techniques or tools necessary for measuring forests.

The publication is in two sections. The first part provides background information, definitions and a general introduction to timber inventory. The second part contains step-by-step instructions for carrying out a timber inventory.

The publication, *Conducting a Simple Inventory*, was developed by Dr. Jason Henning and Dr. David Mercker, University of Tennessee. It is available on-line at <http://www.utextension.utk.edu/publications/pbfiles/PB1780.pdf> or hard copies can be purchased for \$5 at the same link.

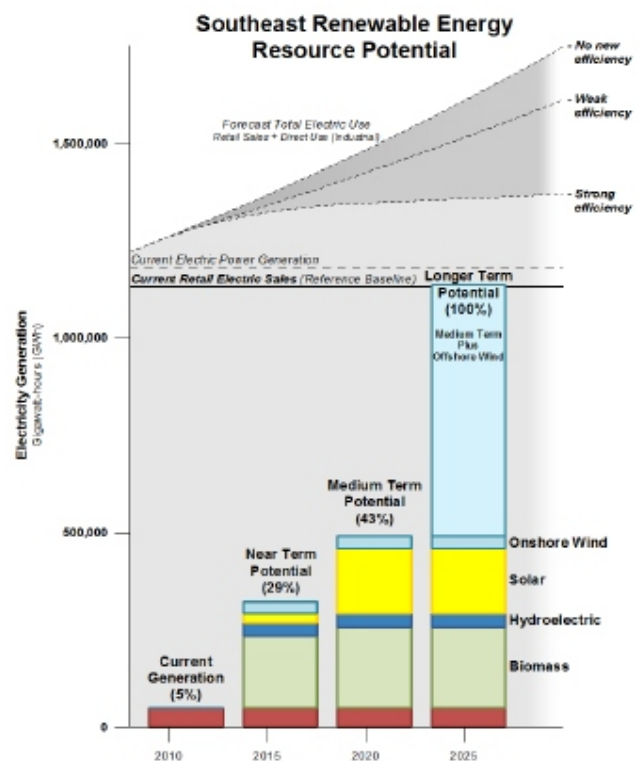
## Using Wood to Meet a Renewable Energy Standard

Adam Taylor, Assistant Professor, Forest Products

There is increasing discussion of implementing a national renewable energy standard (RES). Such a measure would require electrical generating utilities in each state to make a set fraction of their electricity from renewable sources. There has been debate in the news about whether the Southeast could meet the standard but woody biomass would be key to generating more renewable energy in this region.

According to the legislation currently being considered, the U.S. electricity supply coming from renewable energy sources would gradually increase to 4 percent in 2011-12, 8 percent in 2013-15, 12 percent in 2016-18, 16 percent in 2019-20 and 20 percent in 2021-39. Renewable energy sources under the bill would include wind, solar, hydropower and biomass such as wood. Some power companies and regulators oppose a RES because they fear that they do not have sufficient supplies of affordable renewable energy sources.

However, the Southern Alliance for Clean Energy has done an analysis (see chart) that suggests that biomass could provide a significant and readily available resource for meeting a RES. Tennessee has abundant and growing forest resources and the forest products industry has long been a major user of biomass (wood)-based energy. New laws requiring more renewable electricity could lead to the increased of wood energy in the state.



*The capacity of renewable energy sources to meet electricity demand in the Southeast.*

[www.cleanenergy.org/images/files/SERenewables022309rev.pdf](http://www.cleanenergy.org/images/files/SERenewables022309rev.pdf)

## Wildlife Management Calendar for May

Craig Harper, Professor, Wildlife Management

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### Habitat Management

Plant native warm-season grasses and associated forbs

- non-native cool-season grasses (such as tall fescue, orchardgrass, and bromegrasses) should have been killed last fall before planting!
- spraying cool-season grasses in spring before planting nwsgr is not recommended; spring spraying will result in 30 – 50% coverage of csg returning within 2 years
- use preemergence herbicides when planting native grasses
- plant before early June
- plant bluestem, indiangrass, switchgrass, and sideoats grama seed **no deeper** than ¼ inch; eastern gamagrass approximately 1 inch
- be patient!
- refer to **Chapter 5** in *Native Warm-Season Grasses: Identification, Establishment, and Management for Wildlife and Forage Production in the Mid-South*, PB 1752, for additional information

Plant firebreaks and other disked strips not left for naturally occurring vegetation

- iron-clay cowpeas, re-seeding soybeans, grain sorghum, Egyptian wheat, and various millets provide forage and seed for a variety of wildlife species
- refer to *A Guide to Successful Wildlife Food Plots: Blending Science with Common Sense*, PB 1769, for seeding rates and additional information

Plant warm-season food plots

- refer to *A Guide to Successful Wildlife Food Plots: Blending Science with Common Sense*, PB 1769, for planting recommendations

Mow and spray perennial forage food plots for weed control if necessary

- refer to *A Guide to Successful Wildlife Food Plots: Blending Science with Common Sense*, PB 1769, for specific herbicide and management recommendations

Collect soil test samples from plots to be planted this fall and lime now as needed

- applications of lime require about 6 months before full effect on pH is realized

Establish salt/mineral licks for white-tailed deer

- realize mineral licks have **not** been found to increase antler size, body weights, or reproduction; however, trace mineral salt licks may increase visitation to sites that will be used later for infrared-triggered camera surveys

Wildlife damage/population management

- Leave young wildlife alone
- let nature take its course; you'll do more harm than good by trying to "save orphans"

Do not allow pet cats outside; report all feral cats to the animal shelter for immediate removal

- putting a bell around a cat's neck does not keep it from killing birds and young rabbits and squirrels
- house cats are not natural predators as they are not native to North America

Put up chicken-wire fence at least 6 inches belowground and 2 feet aboveground around  
- vegetable gardens to repel rabbits

Put up a 2- or 3-strand electric fence (one strand 6 inches above ground and the other 6 inches higher) to keep groundhogs and raccoons out of vegetable gardens

To repel deer from vegetable gardens, erect a single-strand electric fence (2 ½ feet above ground) with aluminum tabs attached every 3 – 5 feet. Smear peanut butter on the aluminum tabs. Deer are attracted to the peanut butter; however, when they touch the aluminum tabs with their mouths, they learn to stay away.

Plant “alternative” forages for wildlife on the outside of fencing around a garden to satiate the appetite of deer, groundhogs, and rabbits, further helping to keep them out of the garden.

Snakes are beginning to appear with warmer days

- clean up around the house (mow, remove piles of wood, brush, and trash) to repel snakes
- there is no reliable “repellent” for snakes; only “snake oil”

Snapping turtles and others are also more visible as they move about selecting sites to lay eggs

Most skunks are born in May; females will be choosing sites to give birth;

- close all entrances to crawl spaces and other areas where skunks are not wanted.

The best way to get rid of moles is by trapping, but you have to set the traps *correctly*!

Refer to *Managing Nuisance Animals and Associated Damage Around the Home*, PB 1624, for additional information on wildlife damage management.

## **Board Feet Makes Way for Tons** (a dilemma in estimating the weight of standing hardwood trees)

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*David Mercker, Extension Specialist, Forestry*

Foresters in the educational realm have routinely taught landowners and students the fundamental steps in estimating the volume of wood in standing trees, specifically the number of board feet. Two variables, diameter at breast height (dbh) and merchantable log length, are measured then plugged into volume tables to determine board feet. Many tree farmers have likely gone through this exercise at forestry field days, perhaps by using a Biltmore stick. It's a straightforward method and a good thing to know because by applying a price per board foot to the volume, market value can be estimated.

But the method is changing. Many hardwood sawmills are converting from a "volume" system to a "weight" system. In search of greater efficiencies, sawmills are eliminating the middle step that requires logs to be individually scaled in order to estimate board feet. Instead, at the mill, loaded log trucks are weighed upon arrival then re-weighed after unloading. The difference in weight represents the amount of wood for which the logger, and ultimately the landowner, is paid.

In this system logs are typically transported with 18-wheelers in full-tree length rather than as shorter dimension logs. It's easy; it's quick; for sawmills it's good business. But it can complicate matters for landowners and educators as *board feet* makes way for *tons*.

Traditionally, hardwood trees were cut from the forest then skidded full-length to the log deck. There they were graded and "bucked" into smaller logs, separated by species and quality, and loaded accordingly. This allowed for better merchandising of the logs: good quality went to lumber mills, poor quality to pallet or tie mills. To a certain degree merchandising still happens with the new full-tree length system, but it becomes difficult when both finer quality *butt* logs and poorer quality *upper* logs exist on the same tree. The dilemma: to which pile (and mill) do such trees go? If they are sent to the grade lumber mill, price might be docked. If they are sent to low-grade mills, their full price potential might not be reached. The result is prices tend to converge to an average, regardless of species and grade.

Not all hardwood sawmills have gone to the weight system nor will they. Mostly it's a function of mill size. There must be enough economies of scale for a mill to justify the expense of installing weight scales. In addition, the weight system is not as common in portions of the country where the terrain is not suited for easy access and maneuvering of 18-wheel log trucks, and instead shorter tandem trucks are used.

Some tree farmers with hardwood forests now have to become retooled to understand and estimate how much trees weigh. For that matter, so do many professional foresters! In search of literature on estimating tree weight, very little in layman-terms is available. Many forest industries have conducted their own tests and arrived at estimates of tree weight, particularly for Southern pine. But this information is largely proprietary. The University of Arkansas has developed two guides that are both simple and helpful, one for hardwoods and the other for loblolly pine. They can be viewed at:

Hardwood: [http://www.uaex.edu/Other\\_Areas/publications/PDF/FSA-5021.pdf](http://www.uaex.edu/Other_Areas/publications/PDF/FSA-5021.pdf) and  
Pine: [http://www.uaex.edu/Other\\_Areas/publications/PDF/FSA-5017.pdf](http://www.uaex.edu/Other_Areas/publications/PDF/FSA-5017.pdf)

Market and social forces bring change. Most change isn't so bad . . . getting there sometimes is. Astute tree farmers should become informed on how to estimate tree weight, realizing that at least for trees, excess weight can be a good thing!

## **Minimizing Logging Damage to Residual Trees**

*Wayne K. Clatterbuck, Professor, Forest Management and Silviculture*

The best commercial logging will damage some residual trees during harvesting, no matter how carefully done. However, this damage can be minimized by proper road and skid trail layout, proper training and supervision of logging crews, appropriate equipment and attentiveness.

### **Disturbance from skidding**

Skidding wounds degrade the butt log and reduce its potential value. Trees with major injuries such as branches broken during felling and skidding wounds exposing more than 1/3 of the bole circumference will likely develop internal discoloration and decay. In addition, skidding disrupts the litter layer, exposes shallow roots and mineral soil and impacts advance regeneration in the trails. Indiscriminate skidding can disturb a high proportion of the stand and the harvested area leading to a decline in growth of the residual stand and increased potential for surface erosion.

When a skidder mires in saturated soil, it leaves deep ruts and severs the roots of adjacent trees increasing the chances of windthrow. Tree vigor and growth is also diminished by restricting moisture and nutrient uptake and reducing the energy storage capacity of the root system. Deep ruts also make skid trails unsuitable for future use.

### **Tree damage from harvesting**

In older stands, more saplings and poles are damaged during harvesting operations than sawtimber. The loss of, or damage to, these smaller trees can upset the structure and diameter distribution of the stand, especially within the smaller diameter classes. Many trees remain standing, but have major injuries to the crown or the bole. Damaged trees can comprise 1/5 of the remaining basal area in partially cut stands.

Every re-entry at subsequent cutting cycles will wound additional trees and re-injure some of the previously damaged trees. Some trees will have multiple wounds adding to more loss of value through defects, discoloration and decay.

With thinnings, most of the residual trees are in the upper canopy positions. The shorter and smaller trees are cut (low thinning). Felling and skidding have more impact on the smaller trees. Their loss is not important. By contrast, cuttings that remove the largest trees from the stand will more likely damage future crop trees.

The combined losses of small trees in felling and skidding during conventional thinning may drop the residual density by as much as 10 percent below the target level. In addition, up to 20 percent of the remaining trees in thinned stands may be damaged by skidding. The greater the thinning intensity, the more extensive the damage is on residual trees.

Improvements in logging machinery have changed harvesting operations, even for intermediate stand treatments (thinnings). Mechanized felling and bunching and grapple skidding, when done properly, minimize logging damage when compared to conventional tree-length operations. Bucking logs before skidding reduces the sway and damage potential to trees adjacent to the skid trail. Most skidding damage occurs from turning loads on a skid trail when loads do not track in the center of the trail along curves.

### **Recommendations for reducing log damage**

Logging damage is limited through preventive measures as follows:

- Share your concern about limiting logging damage with the logging contractor and review ways to promote careful work among tree fellers and machine operators.
- Consider marking “leave” trees instead of “cut” trees if it will help the logger avoid them.
- Use directional felling to divert falling trees away from high-quality residuals and align the boles for efficient skidding with minimum turning.
- Remove large branches and forks from felled trees so they track well and fit the skidding corridors.

- Insist on a well-planned access system that does not cover more than 10 to 15 percent of the area and monitor for compliance.
- Do not allow skidding when the soil is too wet.
- Use well-organized and fairly straight skidding trails that bypass poorly drained areas and accommodate machine operations. Minimize turning, avoid sharp turns and keep loads in the center of the trail.
- If possible, avoid harvesting during the spring when the bark on residual trees is easily skinned.
- Plan ahead before the logging operation commences. Various logging equipment requires different kinds of skid trails.
- In mechanized tree- or log-length operations, place wood piles left by the feller-buncher inside major skidding corridors and not among the residual trees. Thus, damage to trees adjacent to the skid trail is avoided when loads are turned.

Take an active rather than a passive approach to harvesting operations to insure compatibility between logging and the silvicultural goals. To succeed, steps should be taken to keep damage within tolerable levels for your management objectives.

*Adapted from: Ralph Nyland, Central Hardwood Notes 8.02*

### **National Forest Landowners Conference, “Reality Check: Forestry Facts or Fantasies” May 27-29, 2009, Amelia Island Plantation Resort, Amelia Island, Florida**

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The excitement continues again this year at the **2009 National Forest Landowners Conference** with **education sessions by leading experts**, a tradeshow chock-full of forest management product and service providers, and social events where you can visit with friends and build valuable contacts.

#### **Topics include:**

How Bioenergy Impacts Forest Management  
Carbon Market Opportunities  
Environmental Regulation  
Improving Family Communications and Intergenerational Transfer  
Lessons of *The Land Report 100*  
Vegetation Management Innovations  
Tax Planning  
Risk Management  
Insurance for Forest Landowners

#### **Networking and Social Events:**

Fort Clinch Cookout  
President's Reception  
Membership Appreciation and Awards Luncheon  
Young Forest Landowners Icebreaker  
Paper Mill Tour  
Live Auction and Gun Raffle  
Tradeshow and Silent Auction

### **Members-Only Discount Deadline: April 25**

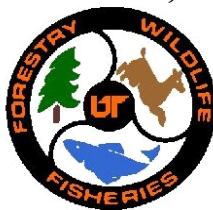
Members, receive a discounted Early Bird Rate if you register by April 25! Each paid accommodation with a two-night minimum stay will receive a \$50 resort credit applicable to resort-owned restaurants, golf, tennis, on-property nature tours, bicycle rentals, beach umbrellas and chairs, Kid Camp Amelia, Just for Kids program, and Island Hoppers. Credit may not be used against accommodations. Individual reservation deposit is one night. Deposits will be refunded if reservation is cancelled at least 7 days prior to arrival.

For more information, please contact Susan Johnson or visit the Forest Landowners Association online: Email: [sjohnson@forestlandowners.com](mailto:sjohnson@forestlandowners.com) Phone: (800) 325-2954  
Web: [www.forestlandowners.com/content/annual-conference](http://www.forestlandowners.com/content/annual-conference)



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