



Forestry, Wildlife & Fisheries Update Newsletter

Department of Forestry, Wildlife and Fisheries

George Hopper, Department Head

January 2004

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

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Forest Management & Timber Taxes

Calendar of Events

Jan. 16 - 17

U.S. Freshwater Prawn & Shrimp
Growers Association Annual Meeting
Tunica, MS

Feb 3 - 4

Tenn. Agricultural Products Assoc.
Contact: Hugh Savoy
hsavoy@utk.edu

Feb 22 - 24

Annual Meeting of the Southeast Deer
Study Group Meeting
Lexington, KY

Mar 1 - 5

Aquaculture 2004
Hawaii Convention Center, Honolulu
Contact: worldaqua@aol.com

Mar 3 - 5

Annual Meeting of the Tennessee
Chapter of The Wildlife Society

Notes From the Web

Samuel W. Jackson, Extension Forestry

This month, we'll be featuring two good informational sites for an issue that is very important to Tennessee. Chronic Wasting Disease (CWD) is a major concern for farmers, hunters, and others concerned with wildlife health. The disease, a spongiform encephalopathy, is a neurological disease that affects elk and deer (cervids) in North America. It can have a big impact on both wild and farmed cervids. The good news to Tennessee residents, though, is that the disease has not been detected in any deer or elk here. Currently, CWD has been found in farmed populations in nine US states and two provinces of Canada. In eight states and one Canadian province, CWD has been found in wild populations of deer and elk.

A group of organizations, including the Rocky Mountain Elk Foundation, the Boone and Crocket Club, and the Mule Deer Foundation, have teamed up to provide detailed information about this disease. The Chronic Wasting Disease Alliance website can be found at <http://www.cwd-info.org/>. In addition to basic information about the disease, where it came from, and where it currently is found, the site gives information state by state, allowing users to see the most current status of CWD related news for their area. There is also an interactive map, detailing where the disease has been found. This site is a good way to keep up on CWD news and information.

The United States Department of Agriculture Animal and Plant Health Inspection Service hosts a similar site at <http://www.aphis.usda.gov/vs/nahps/cwd/#Diagnostics>.

This site contains several fact sheets, frequently asked questions, and information about what USDA is doing to control or deal with CWD.

It is always a good idea to be aware of what is going on, even if it does not directly affect our state at this time. These websites provide valuable information for understanding Chronic wasting Disease.

Management Calendar for December

Wildlife

Continue planting trees/shrubs for wildlife

- use as a hedgerow to break up fields into sections
- use soft- and hard-mast producers (see PB 1633 for list of species)

Erect boxes for wood ducks and bluebirds

- 1 box per 100 yards of shoreline is adequate for wood ducks
- clean out old wood duck boxes and put in fresh wood shavings (about 4 – 6 inches)
- bluebird boxes should be no closer than 80 yards apart
- up to 9 or more bluebirds may roost in a single box during the winter

Continue Timber Stand Improvement activities

- select good mast producers and release their crowns by girdling competitors and spraying herbicide solution into wound
(1 quart Garlon 3-A / 6 ounces Arsenal AC / fill to 1 gallon water)

Build brushpiles

- put large stems on bottom, small stems on top

Keep bird feeders full

- black-oil sunflowers are a favorite of many birds
- thistle seed is preferred by goldfinches
- suet provides energy for lots of birds during the winter

Strip-mow dove fields

- complete mowing now for late winter seed source

Don't bushhog oldfields yet – wildlife needs the cover for another month or so!

Revised IRS Form T (Timber) Forest Activities Schedule

Larry Tankersley, Extension Specialist, Forest Management

As expected the IRS has revised Form T. Two major changes are obvious when you read the form. First, the minor schedules have been eliminated and the term “schedule” has been replaced by “Part”. Part I is Acquisitions, Part II is for Timber Depletion, Part III is Profit or Loss From Land and Timber Sales, Part IV is Reforestation and Timber Stand Activities, and part V is land Ownership.

The second change is the guidelines on when Form T must be filed. Quoting from page 1: “You are not required to file Form T if you only have an occasional sale of timber (for example, one or two sales every 3 or 4 year). However, you must maintain adequate records of these transactions and other timber-related activities during the year, as discussed in Record Keeping on this page. These transactions may be treated as an investment for tax purposes if your property is not held for use in a trade or business.”

The instructions on the form indicate a greater awareness by the IRS of the distinction between a timber activity conducted as an investment and an activity that rises to the level of a business. They also place greater emphasis on the need to keep records adequate to substantiate transactions reported on your tax return. From the Timber Tax website.

For more information contact: *Larry Tankersley at 865-974-7346*
ltanker1@utk.edu

New Publication Helps with Timber Taxes.

Larry Tankersley, Extension Specialist, Forest Management

“*Setting up the Books: A Forest Owner’s Guide to Capital Accounts and Recordkeeping for Federal Income Tax Purposes*”, PB 1691, is now available at the mail room and online under Forestry Publications for your use.

As many of you know for years, we have been trying to explain the idea of a “Timber basis” to many of our forest stewardship clients. This has been especially difficult relative to casualty losses due to ice, wind and most recently southern pine beetle. This publication attempts to explain what a timber basis is and how one might go about setting one up, thus the title *Settin’ up the Books*.

Each county Extension office should have a copy. If you need additional copies order them through the usual process. If you need more than they will send you, let me know and I can get the number you need.

If you would like a shorter version for your folks, let me know. For some groups this is a pretty popular winter meeting.

Keep up the Good work and Keep in touch!

For more information contact: *Larry Tankersley at 865-974-7346*
ltanker1@utk.edu

Plan Pond Management Now*Thomas K. Hill, Professor, Fisheries Management*

This seems to be the time of year for reflection and planning. As you reflect on pond management activities that were either done or left undone last year, a couple of suggestions come to mind that may be worth consideration for your pond in 2004.

If your pond needs to be limed, do it now, certainly before the end of February. Lime and fertilizer should not be applied together because the calcium carbonate will cause the phosphate in the fertilizer to precipitate out and be unavailable as a needed nutrient for the plankton. Also, the lime will have more time to go into solution by warm weather in the Spring when pond fertilization is started.

The second suggestion has to do with pond fertilization. Liquid pond fertilizer is available in most all farm supply stores now. It will save you time and effort for sure and the costs will be comparable to granular fertilizers. The liquid pond fertilizers will have analyses of either 10-34-0 or 13-37-0. They are both high in phosphate which is usually the limiting nutrient.

A gallon of the liquid fertilizer per surface acre is sufficient for an application. This amount will stimulate the desired phytoplankton bloom. The liquid fertilizers actually work faster and last longer than granular types.

Remember, pond fertilization makes more food available for the fish. More pounds of fish will need to be harvested so more time spent fishing will be required, but who is going to complain about that!

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Forest Legacy Program*Paul Ensminger, Tennessee Department of Agriculture*

In June of 1999, Governor Don Sundquist approved Tennessee's participation in what is known as the Forest Legacy Program. The Forest Legacy Program (FLP) is a US Forest Service conservation program dedicated to keeping our state's forestland in production. As population and development in our state increases, available productive forestland decreases. The FLP is intended to help stem this tide.

Through the Forest Legacy Program, private forestland can be protected from this development threat. This is accomplished through FLP funds being used to purchase interests (fee simple or conservation easement) in land. The program also accepts donations of fee simple and conservation easement interests.

The first year of Tennessee's participation in the program (FY 2000) resulted in 400,000 federal dollars being earmarked for various private forested tracts in our state. Last year (FY 2004) netted \$1,827,000 for FLP use in our state. Tennessee's total FLP allocations to date total almost \$15,000,000. We have every expectation that next year's FLP allocation will be substantial as well.

To be eligible for consideration for these FLP funds, a nominated tract must be reviewed by a sub-committee of the State Forest Stewardship Committee. At this annual meeting, the nominated tracts are considered against FLP objectives and are ranked accordingly. These ranked tracts are then submitted to the US Forest Service for funding consideration. The next meeting of this committee will be on June 15, 2004 in Nashville. At this meeting, submitted

tracts will be reviewed and ranked for consideration against FY 2006 FLP funds.

A private forestland owner should decide now if he wants his property included in the review process on June 15, 2004. There are several preparatory steps that must be taken before a nomination can be presented to the "Forest Legacy" committee. Those interested in learning more about the program and the nomination process should contact:

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Delano, TN 37325

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Return of the Flooded Forest

David Mercker, Extension Assistant, Forest Management

Sandbags, river dams, levees and canals are just a few of the devices we have developed to keep the rivers within their banks. Often, however, our efforts are not enough and the water reclaims its territory for a while. Many landowners are beginning to realize the futility at beating the natural environment at its own game and are returning bottomland fields that have been deemed nearly unfarmable to their original use . . . bottomland forest.

Bottomland forests are invaluable for many reasons. During seasonal flooding, the excess water spreads over these areas, slowing the flow. Whereas cleared bottomland often lends to soil erosion and does little to decelerate the rushing waters, bottomland forests serve as a relief valve. As the water rises and flows into these areas, the rich soil absorbs water while the trees and other plants retain moisture within their roots, slowing the recession of water to the river.

During periods of heavy rain, soil is washed into the bottoms from upland areas and water channels. As the water slows, this soil is then deposited onto the bottom areas. Pollutants, such as farm chemical, sewage, industrial waste, organic matter, etc. are deposited along with the soil. The cleaner water then moves downstream, remains in pools for fish and wildlife, or soaks, into gravel underlain soil to be added to the underground water table. It then becomes available for reuse by plants, animals or humans.

Trees and other plants take up the water that remains in the bottoms and transpire the water from their leaves back into the atmosphere, becoming the source of future rains. The nutrients, pollutants, and soil left behind are utilized by a multitude of plants, micro-organisms, and animals, and are recycled safely into the food chain. In fact, they contribute to making the soil in these bottoms some of the most fertile. Thus a crop that is better suited to the wetter conditions, such a certain species of trees, grows even faster than it might on other sites. Many people do not realize that some of the most valuable species of trees, such as oaks, black walnut, pecan, and ash as well as some less desirable species, including cottonwood, silver maple, shellbark hickory, sycamore, and bald cypress are suited to these areas.

The "bottom" line is, the factors that make bottomland unproductive for other uses are actually assets for tree farming. The US government realizes this and is encouraging afforestation efforts on bottomland through the Conservation Reserve Program. The University of Tennessee Agricultural Experiment Station in Jackson is participating in this by creating a 120 acre bottomland forest through row crop restoration. Nearly 51,000 hardwood seedlings are being

planted to create a public demonstration area. It's a model that hopefully will be observed and adapted throughout the Southeast.

For more information contact: *David Mercker, Extension Assistant, Forest Management*
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Quality Hardwood Veneer - Introduction

David Mercker, Extension Assistant, Forest Management

Private forest landowners have long understood that some trees are distinguished as being exceptional. Not every forest contains those rare, exceptional trees. In the hardwood industry, such trees are termed *veneer*. From veneer trees, come veneer logs; from veneer logs, come veneer sheets. Unlike most logs which are processed into conventional lumber, veneer sheets are thin layers of wood produced by slicing logs.

Essentially any log can be processed as veneer. However, for hardwood trees, normally only those logs of desired species and with finest characteristics are selected. This is especially the case when the finished wood product is used as a **face veneer** (surface covering) on top of core stock veneer for decorative purposes. **Core stock veneer** is the underlayment on which the face veneer is placed. Core stock is common and does not require the fine characteristics as does face veneer. For example, red oak cabinets could have side panels with a thin layer of fine oak face veneer overlaid on a thicker layer of common yellow poplar core stock veneer. The focus of this series of articles is primarily on hardwood face veneer and the trees that produce it.

Veneers are erroneously accepted as a somewhat recent development in the timber industry. In truth, the trade originated nearly 3,500 years ago by the Egyptians, evidenced by coffins discovered in ancient tombs (Clark 1965). Modernization and expansion in the veneer industry occurred in the 20th century, improving construction and design of furniture and leading to better utilization of the wood resource.

Users of these articles will likely be landowners (growers of veneer trees), loggers (buyers of veneer trees), millers (processors of veneer trees), and educators and students (teachers and learners of veneer trees). Future articles include:

- Veneer Markets
- Methods of Slicing Veneer
- Criteria for Veneer Trees
- Hardwood Tree Species Commonly Veneered
- Forest Management for Hardwood Veneer, and
- Selling Veneer Trees.

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Forest Land For Sale???

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

The land area in Tennessee is composed of 55 percent forests, more than 14.4 million acres. Non-industrial private landowners and other private corporate (non-wood using) entities own nearly 80 percent of the forests (11.5 million acres), while forest industry controls 10 percent of the forest land (1.4 million acres). National forests, national parks, state parks and other public lands encompass the remaining 10 percent or 1.4 million forested acres. Contrary to popular opinion, Tennessee has more land in forests now than 50 years ago.

Forest industry is getting out of the land business. Industry is finding it less expensive to purchase wood on the open market than to grow it themselves and assume the responsibilities (and public relations) of land management. Owning forest land is not cheap. The expenses, responsibilities and risks of land management, i.e., property taxes, insurance, liabilities, management costs, access, vandalism, fire, boundary lines, etc., are costs that must be accounted for and assumed on an annual basis before income is derived from the sale of trees. Forest industry has borne the brunt of many of the environmental criticisms of forest management (whether deserved or not), presumably because they are large, recognized companies with deep pockets. In reality, only a small portion of harvested wood comes from industry lands and most of the time on these lands, a professional forester is in charge. The majority of wood harvested is from private, non-industrial land, where a forester may or may not be present.

Evidence is mounting about the disposal of forest industry land in Tennessee. Just in the last few years, Huber Corp. has sold their land, International Paper sold the Royal Blue property to the State, Weyerhaeuser and Packaging Corporation of America has sold their land holdings to investment companies, Westvaco sold their land south of I-40 in west Tennessee, and Bowater has sold their land in the Rugby area and all their holdings in Georgia. Forest investment companies are looking at short term (less than 10 year) ownership and will sell the land and trees to others. Most all forest industry land is on the market today and probably within the next 10 years, little forest land will be held by industry.

This trend is nationwide. Kimberly-Clark, a large manufacturer of diapers, tissues, paper towels and other paper products, only has manufacturing facilities and does not own forest land. They buy timber and pulp on the open market. The former Mead, Willamette, and now Weyerhaeuser mill in Kingsport, TN does not own forest land, and has always bought wood on the open market.

What are the impacts of the disposal of forest industry land? Probably the most pertinent benefit is that there will be more competition among the wood-using industry for the wood of private forest landowners. This will provide more economic incentive for better management of private forest lands. A problem with the sale of industry land is that much of the land is being sold in smaller parcels that will increase the amount of fragmentation and parcelization. On a recent visit to the Cumberland Plateau, I found forest land, about 12,000 acres, being harvested, blocked and sold for many uses: residential development, hunting parcels, pasture, and vacation homes. We are also receiving inquiries from potential individual buyers about the financial aspects of buying 200 to 300 acres of forest land, harvesting a large proportion of the tract to reduce the amount of the loan, and then building a home or a cabin on the remaining acreage.

Large blocks of forest land will continue to be subdivided as they are sold. The Southern Forest Resource Assessment (SFRA) predicted further fragmentation and parcelization (urbanization) of the forested landscape in Tennessee. The sale of forest industry lands will accelerate this fragmentation of the forest resource. However, competition for timber among timber buyers will probably increase allowing forest landowners better access to markets. Then the question to be contemplated is whether large tracts of forest land are more desirable, even if owned by forest industry or if smaller, dissected tracts of multiple owners with multiple uses and values are better. With the sale of forest industry lands, large forested tracts are disappearing.

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Healthy Forest Restoration Act

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

President Bush recently signed “The Healthy Forest Restoration Act of 2003” authorizing funds nationwide to conduct thinnings and other management activities to insure forest health on federal and private lands. Most of this funding will go to Western States where there is a greater propensity for wildfire. The legislation authorizes \$760 million a year for tree-thinning projects on 20 million acres of federal land deemed at high risk from catastrophic fire, with half the money being spent on thinning projects within the wildland-urban interface.

Although this legislation is definitely and presently needed to alleviate excessive buildup of fuels, especially with the wildfire occurrence of the past several years, two questions should be asked. First, whatever happened to multiple resource management? If these forests had been actively-managed for the last 20 years, would there be a need for this legislation and the resulting expense? Fuel reduction is one aspect of resource management. If these forests had been managed proactively, I doubt that there would be a need for fuel reduction. These thinning activities are stop-gap techniques for fuel reduction now, but without active forest management, these excessive fuels will return in 10 to 20 years. Then even more funds will be expended.

The second question is who is responsible for the wildland-urban interface (WUI)? Should communities and homeowners or society be accountable for the unrestricted development and inappropriate homeowner choices in building and living within these fire-prone areas? The result is increased difficulty and expense in suppressing fires and increased costs to society from fires that inevitably escape control. Wise choices should be made in the initial decision-making process to lessen the chance of wildfire.

Although the intentions of the Healthy Forest Restoration Act are commendable, the 4-year political cycle does not lend itself to the long-term prosperity and health of our forests. More thought and actions are required if we are truly interested in maintaining long-term forest health, especially in the face of excessive fuel buildups and the development within the wildland-urban interface. The absence of multiple resource management on these lands will continue to hinder our ability to address these difficulties.

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Burn Oldfields and Woods for Enhanced Wildlife Habitat

Craig A. Harper, Associate Professor, Wildlife Management

Controlled burning can improve wildlife habitat in both woods and fields more than any other management practice. Using prescribed fire can improve forage, seed production, and cover, while protecting the area from wildfire. Late winter (February – March) is an excellent time to burn because environmental conditions often permit rapid smoke dispersal and spring green-up is rapidly approaching.

Burning oldfields is highly recommended over bushhogging. Not only does burning set back succession and improve wildlife habitat, it is also easier and cheaper than bushhogging! Burning consumes the thatch layer (dead leaves and grass) in the field and stimulates the seed bank (those seed in the top couple of inches of soil) to germinate. This helps promote plant diversity and the resulting plant growth is often more nutritious following a prescribed fire because of nutrients cycled from the ashes into the topsoil. By rejuvenating and stimulating herbaceous growth, forage, seed, and insect availability for wildlife is increased. Also, once the thatch layer has been consumed, an open condition is created at ground level, enabling quail and turkey broods, rabbits and many songbirds to move about through the field under the protection of a lush herbaceous canopy. The open condition at ground level also makes fruits and seeds (e.g., blackberries, ragweed, beggarslice, pokeweed, partridge pea) that fall to ground available to birds. Burning oldfields on rotation every 2 – 3 years will continue to set back succession and keep the field from becoming a thicket of small trees.

The exception to the description above is a field dominated by perennial cool-season grasses (e.g., tall fescue and orchardgrass). These grasses out-compete desirable vegetation, provide low-quality forage, and create a dense structure at the ground level that is unattractive to wildlife. If tall fescue is present and quality wildlife habitat is the objective, the field should be sprayed after burning with a pre-emergence application of 12 ounces of Plateau[®] herbicide. This selective herbicide should remove the tall fescue cover and allow desirable plant species to germinate and grow. Discing after burning may help stimulate the seed bank, but planting should not be necessary.

Prescribed fire also can be used in woods – both hardwoods and pines – to enhance conditions for wildlife. As in a field, burning consumes the litter layer in the forest, which protects the stand from wildfire and stimulates the seed bank. The effect of burning in woods is greatly influenced by the amount of light entering the canopy and reaching the forest floor. Generally, the best effect for a wide variety of wildlife species is realized by burning a stand after it has been thinned to approximately 60 percent canopy coverage. This allows sufficient sunlight into the stand to stimulate plant growth in the understory. To help control woody sprouts, allow a year of re-growth after thinning before burning. Thereafter, a burning rotation of 2 – 4 years (depending on site) should limit woody sprouts and maintain an attractive understory for wildlife.

The best days for burning in late winter typically occur several days after a cold front has passed through with less than 1 inch of rain. During this time, persistent winds (5 – 10 miles per hour), relatively low humidity (30 – 55 percent), cool temperatures (below 60°F), and sunny days can be expected. It is important that all burning follow a burn plan prepared by a trained professional.

For further information concerning the benefits of prescribed fire and assistance with a burning plan, contact the Tennessee Division of Forestry or the Tennessee Wildlife Resources Agency.

For more information contact: *Craig Harper at (865) 974-7346*
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COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS

The University of Tennessee Institute of Agriculture, U.S. Department of Agriculture,
and county governments cooperating in furtherance of Acts of May 8 and June 30, 1914.

Agricultural Extension Service

Charles L. Norman, Dean