



FWF Update Newsletter

Department of Forestry, Wildlife and Fisheries

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

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Announcing Tennessee Healthy Hardwoods Spring Field Days

David Mercker, Extension Specialist, Forestry

Four years ago, the Division of Forestry, University of Tennessee Extension and the Tennessee Forestry Association partnered in developing high-quality regional forestry field days. The purpose of these events was to educate landowners, feature state forests, and focus on hardwood silvicultural systems. Dates have been set for this spring's **Tennessee Healthy Hardwoods Field Days**, and include: **May 2** – Chickasaw State Forest in West Tennessee and **May 30** - University of Tennessee Forest Resources Center in Oak Ridge. The theme for this series is "Income Opportunities for Your Forest," and will include presentations on timber inventory and marketing, emerging markets, log and lumber grading, plus a portable sawmill demonstration. Plans are to duplicate the program at 2 or 3 more locations later in 2009 and 2010. Mark your calendars. Details are forthcoming.

West Tennessee Foresters' Group Annual Meeting

David Mercker, Extension Specialist, Forestry

West Tennessee Foresters' Group Annual Meeting will be held March 2, 2009 at Boyettes Restaurant, Reelfoot Lake, Tiptonville, TN. Registration begins at 5:00 p.m. Cost is \$17.46 which includes a family style dinner. Speaker will be Dr. Jim Byford, Dean, University of Tennessee, Martin on the topic, "Timberland and Fragmentation - Black Cloud with a Silver Lining" For further information contact David Mercker at 731-524-4703. No registration is required. Boyettes is located approximately 3-4 miles east of the intersection of Rt. 78 and Rt. 21 in Tiptonville.

2009 National Forest Landowners Conference

Bring your family to picturesque Amelia Island, Florida, Memorial Day week (May 27–29), and join your forestry friends and colleagues for the 2009 National Forest Landowners Conference, themed "**Reality Check: Forestry Facts and Fantasies.**" While you receive a balanced view of today's trends in forestry during conference sessions, your family can enjoy a variety of activities at the Amelia Island Plantation Resort and surrounding area. Topics will include: Emerging Markets, Renewable Energy, and Realistic Strategies. Speakers will include: Lee Thomas, Rayonier ; Matthew Pelkki, University of Arkansas; Lawrence H. Selzer, The Conservation Fund. For more information, please contact Susan Johnson or visit the Forest Landowners Association online: Email: sjohnson@forestlandowners.com; telephone: (800) 325-2954; Web: www.forestlandowners.com/content/annual-conference.

Hardwood Analysis and Trends (HAT) – February 2009

David Mercker, Extension Specialist, Forestry

The marketplace for hardwood logs and lumber in 2008 was very challenging, a difficult year for sawmills, loggers, and secondary manufacturers alike. The entire chain from landowners to retailers endured downward pricing pressure, a trend that is likely to continue, at least in the short-run. Since the stock market's tumble in October, #1 common white oak lumber is off 15% and red oak has declined 9%. As demand for hardwood products has slid, so has sawmill lumber production. Many mills throughout the region have been forced to reduce from two shifts to one, and often the *one* that is running, is not at full capacity. A quick snap-shot of the current condition of the hardwood market follows.

Supply – we continue to have very high supply of standing hardwood saw timber, especially with oaks, yellow poplar, and hickories. The US hardwood forests have enjoyed a +117% increase in hardwood growing stock from 1953 to 2007. This should confirm that our forests are being managed sustainably, at least from the view point of *growing* wood. But supply on the stump doesn't necessarily indicate an abundance of logs available for processing. Timber sales are down, as are the number of loggers, collectively these have lowered log supply.

Hardwood Lumber Production – is off, way off. From 2005 to present, eastern US hardwood production is down 28.4%, to the lowest annual total production in 27 years. It decreased seven of the last nine years. Less-than-favorable business conditions are to blame.

Demand – end-user consumption of wood from 2007 to 2008 fell 12%, with lead decliners being furniture, millwork and flooring. Of the eight hardwood market sectors commonly tracked, six decreased, only two increased. A breakdown includes: pallets -3%, furniture -30%, exports -17%, millwork -30%, cabinets -8%, flooring -38%, railway ties +10%, mat timbers +2%. The recent drop in housing starts has affected the demand for hardwood furnishings. Existing housing inventory is still very high and until surplus is bought-up, housing starts will remain low and demand for many hardwood products will continue to suffer. Consider that the demand for hardwood furniture is off 73% since 1999.

A Return to Red Oak is Vital – the eastern US hardwood industry, including Tennessee, is heavily reliant on red oak. Oak species in general and red oak in particular, have long been the mainstay of our mills. And although other species can temporarily fill voids in red oak demand, mills cannot ignore processing red oak logs for long. When timber harvesting happens, red oak will largely be in the mix, and mills will have to continue to deal with it. Recent substitutes for red oak are domestic hard maple and imported rubber wood.

Opportunities with emerging non-traditional markets such as: biomass, biofuel, certified wood, carbon credits and other ecosystem markets will be welcome, albeit slow to develop. Many of these will require forests to be certified, and landowners should continue exploring this as an option for their land. (Summarized with permission of the *Hardwood Market Report. 2008: The Year At a Glance*. Memphis, TN).

Wildlife Management Calendar for March

Craig Harper, Professor, Wildlife Management

Habitat Management

Burn woods and old-fields using prescribed fire to enhance conditions for wildlife

- secure burning permit and develop burning plan with Tennessee Division of Forestry
- make sure firebreaks are in place
- get help from experienced personnel if you don't have experience burning
- burning fields is **much** more beneficial for wildlife than mowing!
- refer to Chapter 6 in *Native Warm-Season Grasses: Identification, Establishment, and Management for Wildlife and Forage Production in the Mid-South*, PB 1752, for additional information on managing early successional habitats

Plant firebreaks for additional forage, seed, bugging opportunities

- alfalfa, clovers, and annual lespedezas can be planted in mid- to late February
- warm-season plantings can be made later in May
- see *A Guide to Successful Wildlife Food Plots: Blending Science with Common Sense*, PB 1769, for seeding rates and additional information

If you won't burn fields, mow in late March – just before spring green-up

- for best results for wildlife, disk the area after mowing to facilitate litter decomposition, improve travel for small wildlife and stimulate the seedbank

Spray tall fescue, orchardgrass, and other perennial cool-season grasses

- spraying now is not as effective at killing these grasses as spraying in October/November; however, a 70% reduction in grass coverage can be expected following spring sprayings
- spray a glyphosate herbicide @ 2 quarts per acre (with surfactant) when grass is 8 – 10 inches tall and actively growing in late March/early April (just prior to warm-season plants germinating or sprouting)
- after grass is killed, burn the field (if needed), then disk to stimulate the seedbank
- when disking in the spring, a preemergence application of imazapic (6 – 10 ounces of Plateau) may be necessary after disking to control johnsongrass, crabgrass, broadleaf signalgrass, and other undesirables germinating in late spring
- 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 on eradicating perennial cool-season grasses and other undesirable species

Disk strips around field edges to encourage early successional growth

- disk strips the width of your sprayer to facilitate killing undesirable plants if needed
- can be used as firebreaks

Finish planting trees/shrubs for wildlife

- establish hedgerows across fields with soft-mast bearing trees and shrubs
- hedgerows can be used to break-up fields into sections
- also plant trees/shrubs in blocks at end of fields or in “odd” areas
- apple, crabapple, persimmon, wild plum, elderberry are good choices
- refer to *Improving Your Backyard Wildlife Habitat*, for a list of other trees and shrubs to consider.

Fertilize/prune trees/shrubs for increased soft mast production

- this is for trees out in the open, not those in woods
- fertilizing oaks in woods is a waste of time and money; to increase mast potential for trees in the woods, timber stand improvement practices are needed

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 replenish with fresh wood shavings (about 4 – 6 inches)
- repair/install predator shields if necessary
- In Tennessee, wood ducks may begin searching for nest sites in February / March
- bluebird boxes should be no closer than 80 yards apart
- up to 9 or more bluebirds may roost in a single box on cold nights

Build brushpiles along or in old-fields that already provide good cover

- put large stems on bottom, small stems on top
- building brushpiles along a woods edge adjacent to a tall fescue pasture or hayfield may do more damage than good because all rabbits present will then be isolated for predation

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 winter
- refer to *Improving Your Backyard Wildlife Habitat*, for information on specific feeders and seed for birds

Finish strip-mowing or silage chopping grain fields to provide seed

Plant perennial clover and alfalfa plots

- ladino white clover, alsike clover, red clover, and alfalfa do well when sown in March
- refer to *A Guide to Successful Wildlife Food Plots: Blending Science with Common Sense*, PB 1769, for information on planting and soil amendment

Spray weeds in cool-season food plots before the weeds get too large

- most cool-season weeds are best killed when sprayed before they reach 3 – 5 inches tall
- refer to *A Guide to Successful Wildlife Food Plots: Blending Science with Common Sense*, PB 1769, for herbicide recommendations
- always read and follow directions on the herbicide label before using

Fertilize cool-season forage plots

- those containing oats, wheat, and/or cereal rye will respond to 30 pounds of N per acre
- fertilize perennial forage plots with P and K according to soil test 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

Complete drawdown of fields flooded for waterfowl

Wildlife Damage/Population Management

Skunks are on the move

- skunks mate in February and March

Close crawl spaces under the house and check for openings in the attic

- helps keep skunks and squirrels from getting into places where they are not welcome

Set traps correctly to catch moles!

- make sure runway (tunnel) is active before setting traps
- excavate 6-inch by 6-inch square exposing runway and determine exact depth of runway
- replace dirt firmly, but not compacted
- set trap at exact depth so mole will be caught

Refer to *Managing Nuisance Animals and Associated Damage Around the Home*, for additional information.

Do Wild Turkeys Influence Quail or Grouse Populations?

Craig Harper, Professor, Wildlife Management

Bobwhite quail and ruffed grouse populations have declined considerably in major parts of their range over the past 20 years. At the same time, wild turkey populations have increased significantly. Without supporting evidence, many people are convinced wild turkeys have contributed to the decline in quail and grouse numbers. “Turkey blamers” cite food competition, nest and chick predation, and incompatibility (area exclusion) as ways wild turkeys have negatively influenced quail and grouse populations. However, often what appears as cause-and-effect actually had no influence at all.

Wild turkeys have a varied diet that includes almost anything they can get down their throat. While they primarily eat acorns, soft mast, forbs, miscellaneous seeds, grains, and insects, on rare occasion you might also find a small mammal, bird, or snake, frog, lizard, or salamander in a turkey’s crop. As you might imagine, gobblers are more likely than hens to eat these larger food items. Wildlife researchers have investigated food habits of wild turkeys for decades, in virtually every area where turkeys exist, during all seasons of the year. Never has a quail or grouse chick been reported in a turkey’s crop, nor has a wild turkey been cited depredate a quail or grouse nest. Does that mean it has never happened? Of course not. I’m sure at some time in the history of the world, a turkey has eaten a quail or grouse chick, and there’s no doubt a turkey has eaten the eggs of the smaller game birds. I’m also sure a wild turkey gobbler has eaten a young wild turkey poults before! But so what? It doesn’t matter. Relatively rare occurrences such as these do not affect populations.

To consider wild turkeys incompatible with bobwhites or grouse is curious and without merit, especially considering cover requirements of the 3 vary considerably. Each has its own unique niche in the natural world. While there may be common foods among them, they co-evolved and have co-existed for thousands of years where their preferred cover types converge. This logic escapes most people who blame turkeys for decreased quail and grouse populations. If turkeys out-compete quail and/or grouse, then how have each existed in the same area over time? Early explorers cited large numbers of all 3 species prior to and even during settlement. So what has changed? HABITAT!!

Wild turkeys are generalists. That is, they can exploit many different cover types and use a broad array of food items. Bobwhite quail and ruffed grouse are more specialized. Bobwhites require early successional habitat; old-fields with native grasses, forbs, shrubs, and brushy cover must be present to support quail. They are not woods birds. Ruffed grouse are woods birds. In particular, they require young forest cover, especially in the 5 – 20-year-old range. Grouse do not use fields to any real extent.

So, what has happened? To bobwhites, a number of things. Small rowcrop fields and the associated fallow fields and brushy fencerows, so common yesteryear, have been sown to tall fescue or bermudagrass as pasture or hayland. Neither are compatible with quail—no food, no protective cover, and too dense at ground level for quail to navigate. Other fields have been allowed to “grow-up,” and trees now cover what once was quality quail cover. Today, production agriculture requires “double-cropping,” which usually provides no suitable cover for quail, at any time of year. Landowners perennially mow and/or spray brush and weeds because they think it looks bad (“It looks snaky” and “What would the neighbors think?!?”). Few realize they are destroying what little nesting or escape cover that might be present for the small game birds.

For ruffed grouse, forest maturation is the problem. Where grouse occur on national forest land in east Tennessee, fewer acres are regenerated now than at any time since the property was acquired by the US Forest Service. Mature forest does not contain high stem densities grouse require. Therefore, an active forest management plan is needed to perpetuate desirable grouse cover. Grouse feed on acorns, beechnuts, and other foods in mature forests, especially near the edge of young forest cover, but the birds are much more susceptible to predation in the more-open mature stands. Wild turkeys, on the other hand, readily use mature forests for nesting, raising broods, feeding, and roosting. So where grouse occur in TN, the forest has matured beyond the ideal stage for grouse and into the ideal stage for turkeys. Would you not expect turkeys to increase and grouse to decrease in this scenario? Of course!

If you are concerned with declining quail or grouse populations, then work to provide suitable habitat; specifically, make sure quality cover is available year-round. Then you’ll realize those ill-regarded turkeys are actually nothing more than innocent bystanders!

Hard Times in the Wood Industry

Adam Taylor, Assistant Professor, Forest Products

Along with many other parts of the economy, the forest products industry is suffering. Demand for wood products is tightly linked to housing activity, so the housing crash created ripples that are negatively affecting loggers, sawmills, flooring and cabinet manufacturers – almost all wood manufacturers – across the state.

Even before the recent economic troubles and the bursting of the housing bubble, there were challenging conditions for wood products producers. Globalization has introduced new sources of competition from around the globe. This has suppressed prices for wood and wood products. In fact, a recent analysis by an economist at the University of Michigan (<http://mjpperry.blogspot.com/>) suggests that lumber is cheaper than it has ever been (after accounting for inflation). In addition, the most prevalent species in Tennessee (the oaks) are currently not as fashionable for many applications as they once were. This ‘double-whammy’ is resulting in a forest products market in Tennessee that many experienced industry folks are calling the worst ever. A number of mills have closed and many more are operating on reduced schedules.

The longer-term outlook is more positive, for those mills that can survive until the market picks up. Tennessee has an abundant, high-quality, sustainable forest resource and American hardwoods are well-regarded in the world market. Demand for wood products is expected to increase in general and fashion may change again to favor darker woods like oak. The forest industry is a large part of Tennessee’s economy. Like other parts of the economy, the wood industry is suffering badly but, although the timing of the recovery is uncertain, we can look forward to a better future for the wood business.



Supervision is Critical For a Successful Timber Sale

Larry Tankersley, Extension Forester

I was visiting the other day with a landowner who had just completed a timber removal/sale. The landowner had worked with a wildlife biologist and forester to remove a substantial amount of timber in order to improve conditions for several wildlife species. The intentions were to maintain several tree per acre for hard mast production and flood the remaining area with sunlight to encourage the development of forbs, grasses and soft mast producing trees and shrubs.

The landowner had clearly marked the trees that were to remain on the site. Paint was applied at eye level and at the ground line as typically recommended. The ground line paint is intended to be seen after the tree is cut.

A contract was also used to explain to the buyer conditions of the sale, including a clause that discussed that the painted trees were not to be cut.

To make a long story short, when reviewing the residual stand after the logger had departed, the landowner suspected that the loggers had removed several of the painted trees. The complaints included the removal of the ground line paint, tops conspicuously placed to discourage verifying the ground line paint, and that loggers had stolen the trees.

All of these certainly could have happened. I haven't followed the story since our visit, but the lesson for me was the need for supervision of the logging operation. Persons actually cutting the trees likely did not read the contract. When they encountered the painted trees they may have noticed that they were prime specimens (large with good grade) and chose to take them while no one was looking. Then, when they were finally told that the marked trees should have stayed, . . . you can take the story from here.

My point is that a contract must be enforced by periodically visiting the logging job as it proceeds. This should be discussed with your consultant if you are using these services or you need to visit the site yourself, looking for contract violations, such as removal of specially designated trees. Upon recognition of the violation, you must notify the buyer immediately and allow them time to convey this information to the logging crew. If the contract includes performance penalties, you have more leverage in getting everyone's attention.

Most logging crews want to do a good job, but as with many human endeavors communication is critical. Let us know if we can provide additional information.

Recommendations For Managing Hardwood Timber On Your Woodlot

Wayne K. Clatterbuck, Professor, Forest Management and Silviculture

When growing and selling timber is an ownership objective, woodlots are usually managed based on four collective considerations: protection, production, marketing and harvesting. General recommendations for management of your woodlot based on these considerations are outlined below. For more information about these recommendations, contact a professional forester, your local Tennessee Division of Forestry office, or your local Extension office.

<u>SUBJECT</u>	<u>RECOMMENDATION</u>	<u>COMMENTS</u>
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PROTECTION

Grazing	Fence livestock from forest	Grazing reduces regeneration, scars crop trees, increases stain in lumber, compacts soil, and reduces tree vigor. Forest do not product good forage.
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Fire	Prevent fires and maintain firebreaks	Fire in hardwood forests scar crop trees, reduces wood and tree quality and kills reproduction.
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PRODUCTION

Quality	Select crop trees early for desired results	Tree values depend on the product produced, i.e., pulpwood, firewood, sawtimber, veneer. Trees should be selected at a young age and left to grow to highest quality product. Generally, there is a scarcity of and high demand for quality timber.
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Match Species to the Site	Grow hardwoods on good sites and pine on marginal productivity lands. Know the site requirements of species in question.	On dry, shallow soils, pine is a better option than hardwoods. Among different hardwood species, soil and site requirements differ. For best production, match species to the site available.
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Intermediate Operations	Use crop tree release and thinning when growing space for further crown expansion becomes limited	Intermediate management techniques are used in immature stands to favor the more desirable species, regulate growth and provide for early financial returns.
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MARKETING

Inventory	Secure a timber inventory before the sale.	Landowners should have accurate estimates of quantity and quality of products before contacting timber buyers.
Advice	Hire a professional forester to sell high volumes of quality timber.	Merchandise timber to increase returns. Foresters know the markets better than most landowners.
Utilization	Market lower quality products locally or use on your property.	Low quality timber can be used for firewood, barnwood, posts, and other local products.
Contracts	Require a written contract.	Contracts protect the seller and the buyer and reduce potential property damages and misunderstandings.
Non-Timber Products	Explore markets for outdoor recreation opportunities or local products	Hunting leases, hiking, birding, camping, other outdoor activities and sale of many other products from the forest offer woodland owners opportunities for extra income.

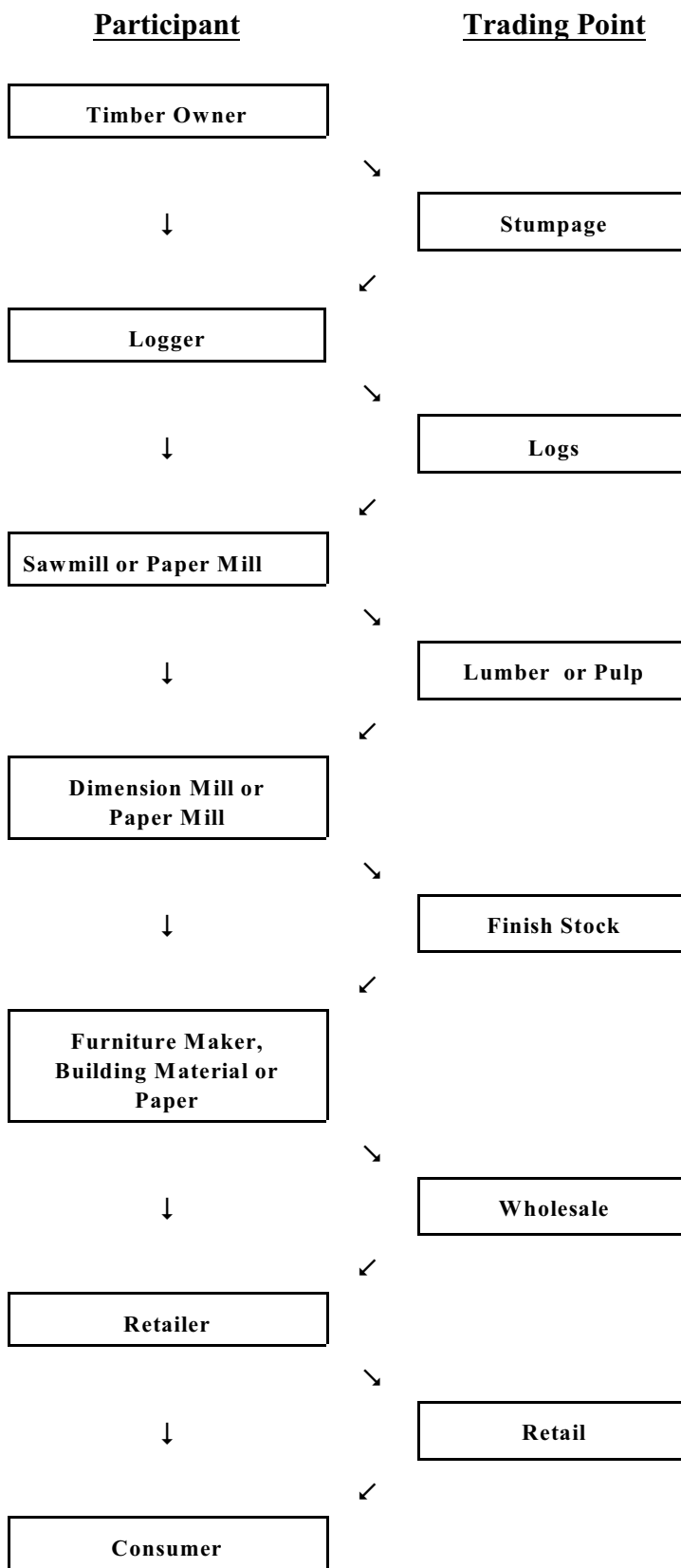
HARVESTING

Diameter Limit Cuts (DLCs)	DLCs should not be conducted.	Selection of trees to be harvested should be based on ownership objectives, tree maturity, future stand composition and structure, and regeneration potential. DLC reduces forest production, quality and value.
Damage	Specify in the contract that stand and property damage be minimized and that Tennessee Best Management Practices (BMPs) for timber harvesting be followed.	Logging in wet weather and the logger's lack of concern for the property can cause costly and permanent property damage.

What Composes the Forest Products Industry?

Wayne K. Clatterbuck, Professor, Forest Management and Silviculture

The forest products industry is composed of many sectors from the forest to the consumer product. The demand for wood is influenced greatly by the housing and building markets since wood is the primary building material. Below is a flow chart of forest dollars showing all the different entities that are in the forest products industry.



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