



Prepared Quarterly by the Forest & Business Analytical Services Unit of the Tennessee Department of Agriculture,
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<http://tn.gov/agriculture/topic/forest-businesses>

***A CONDENSED REPORT ON FOREST PRODUCTS, PRICES, SPECIFICATIONS, EQUIPMENT,
UTILIZATION NEWS, ETC.***



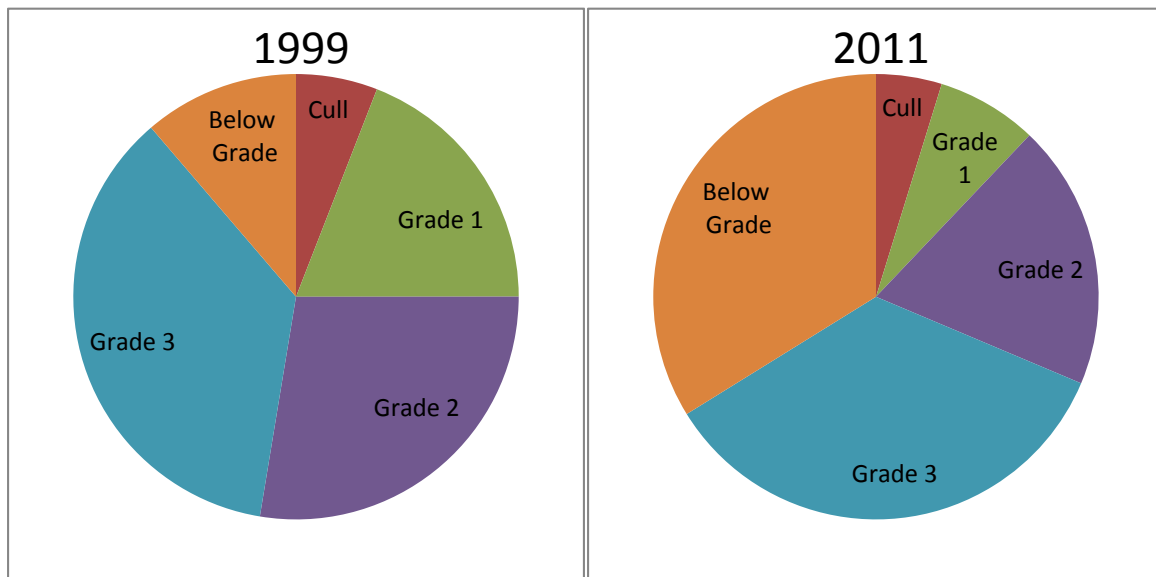
Wagon Gap Overlook, Picket State Forest

Changes in Tennessee Hardwoods Quality

Hardwoods are important to the Tennessee economy, in 2007 the State ranked as the South's top producer of hardwood saw logs and second in 2009 with output of 97.5 million cubic feet falling slightly behind Kentucky. In the 2009 Forest Inventory and Analysis survey (FIA), the upland hardwood management-type accounted for 73 percent or 10.3 million acres of the 14 million acres of Tennessee forest land. The percentage of grade 1 of all hard hardwood sawtimber volume on private forest lands has declined from 19% in 1999 to 7% in 2011 (Table 1). Measured in board feet (BFT), this is a drop from 6.3 to 2.9 billion BFT. Using a stumpage value of \$300 per thousand BFT, the value of this asset has declined by \$995 million. The drop cannot be attributed to falling hardwood inventories, as shown in Table 1, total volume of hard hardwoods on private lands over the period increased from 37.8 to 40.1 billion board feet. Comparing changes over the same period by grades, as shown in Figure 1, it is apparent that volume shifted from grades 1 and 2 into the grade 3 and below grade classes.

Table 1. Change in Hard Hardwoods Volume 1999 – 2011 (Board Feet)

Grade	1999	Percent	2011	Percent	Change
1	6,255,104,637	19.07%	2,937,499,395	7.33%	-53.04%
2	9,049,832,089	27.60%	7,714,937,365	19.25%	-14.75%
3	11,848,078,682	36.13%	13,952,020,099	34.81%	17.76%
Below Grade	3,699,136,385	11.28%	13,559,598,585	33.83%	266.56%
Cull	1,941,984,033	5.92%	1,912,199,267	4.77%	-1.53%
Total	37,794,135,826		40,076,254,711		22.21%



During the period there were some adjustments made in the methods used in the field for grading 1 and 2 logs but volumes in both categories fell during the period with the largest increase showing up in the below grade wood.

Volume harvested for veneer products was down 62% in the period 2005-09 compared to the preceding five year period. This drop in hardwood sawtimber quality has been noticed for many years, the 1980 Tennessee Forest Survey found that 18 percent of the hardwood timber volume was in rough and rotten trees, a decrease in quality from the 16% found in 1971. Based on the same survey, Richard Birdsey in a Forest Service Publication of 1982 pointed out that “Site occupancy by cull trees is a growing problem in Tennessee. Statewide, 26 percent of the basal area is in rough and rotten trees, mostly hardwoods in the seedling, sapling, and sawtimber size classes.” In 2011 FIA data gave the number of cull trees in Tennessee as 28 percent of the total number of live trees one inch or larger. The same survey reported the ratio of grade 3 to grades 1 and 2 on Forest Service lands was 1.8 while the same statistic on private lands was 2.5. In the same year, the ratio of below grade and cull to grade 3 and above was 0.5 for Forest Service lands but 0.65 for private lands.

A high percentage of cull and below grade hardwood sawtimber - usually referred to as low-quality or high graded stands on otherwise highly productive sites - is the direct result of the “continued removal of only the largest and highest-value trees with, in most cases, no stand improvement (McGee 1982).” In addition to the practice of high grading, common species found in southern hardwood forests exhibit variation in the ability to grow with restricted sunlight as shown in Table 2.

Table 2. Shade tolerance of common species in southern hardwood forests

Shade Tolerance Classification		
Intolerant	Intermediate	Tolerant
Black cherry	American elm	American beech
Black locust	Green & white ash	American holly
Black walnut	Hackberry	American hornbeam
Black willow	Shagbark hickory	Blackgum
Eastern cottonwood	Pignut hickory	Boxelder
River birch	White oak	Buckeye
Sassafras	Southern red oak	Eastern redbud
Sweetgum	Chestnut oak	Eastern hophornbeam
Sycamore		Flowering dogwood
Yellow-poplar		Persimmon
Mockernut hickory		Red & sugar maple
		Sourwood

Species such as yellow poplar and walnut are classed as intolerant, they do not grow well in the shade of other trees, most oaks are intermediate, and blackgum and sugar maple are rated as tolerant. “Unfortunately, the majority of the commercially valuable species is classified as intermediate or shade-intolerant (Clatterbuck, 2010).” Over time, when the commercially valuable species are removed, the more shade tolerant species will dominate the stand and

without the ability to grow under their shade, the oaks and other valuable species will no longer be a major part of the stand. Without openings, only the shade tolerant species regenerate and grow at lower light levels.

Reduced hardwood quality is the result of an increase over time of less valuable species and is similar to the problem any gardener faces with weeds. It costs money to control weeds in flowerbeds, gardens or soybean fields and it will cost money to remove less valued and low quality trees from the forest. The hardwood industry is important to the economy of the State and hardwood producers need to consider control of low quality trees as a management cost just as site preparation and planting are a part of pine plantation management.

Literature Cited

Birdsey, Richard A. 1982. Tennessee Forest Resources. Resource Bulletin. New Orleans, LA; USDA Forest Service, Southern Forest Experiment Station. (http://www.srs.fs.usda.gov/pubs/rb/rb_so090.pdf)

Clatterbuck, Wayne 2010. Uneven- age Management in Mixed Species, Southern Hardwoods: Is it Feasible and Sustainable? University of Tennessee Extension Publication PB1798. (<https://utextension.tennessee.edu/publications/Documents/PB1798.pdf>)

McGee, Charles E. 1982. Low-Quality Hardwood Stands: opportunities for management in the interior uplands. USDA Forest Service General Technical Report SO-40, Southern Forest Experiment Station, New Orleans, LA. (<http://www.srs.fs.usda.gov/pubs/23733>)

*This article is an excerpt from a study entitled "High Grading: Reduced Asset Value" by Kerry Livengood.

Delivered Forest Product Prices in Tennessee

April - June, 2015

Product	Specifications**	Prices	Region
Cedar Logs	Length-6' to 12' and min DIB 4" at small end	\$50.00 to \$80.00/ton (also \$350.00 to \$560.00+ MBF Cedar 2/3 Rule) Low grade \$14/ton	II & III
Crosstie Logs	Length-8' 8" min DIB 11" and up Must be sound on both ends	<u>Oak</u> Grade 1: \$408/MBF Doyle Grade 2: \$239/MBF Doyle \$63 per ton <u>Mixed Hardwoods</u> Grade 1: \$336/MBF Doyle Grade 2: \$192/MBF Doyle \$65 per ton	I, II & III

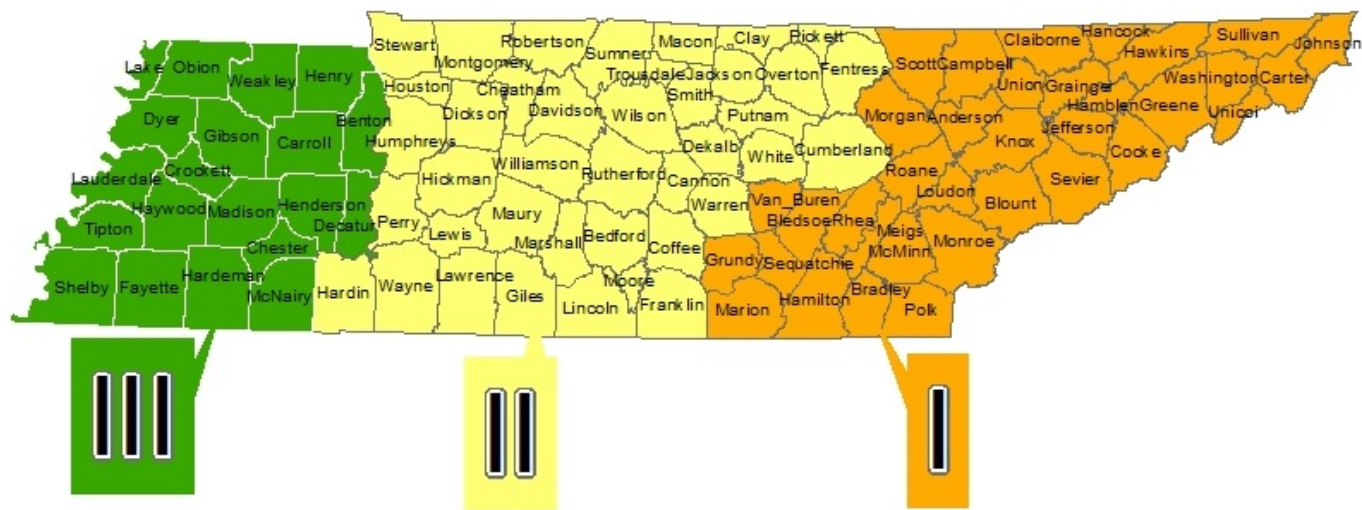
Hickory Handle Logs	Each mill will have their own requirements.	Grade 1: \$475/MBF Doyle Grade 2: \$325/MBF Doyle Grade 3: \$150/MBF Doyle	I & II
White Oak Stave Logs	White Oak-Length: 8 ½' min and add on 2' increments (allow 1 knot per 3' of length", and min. DIB 12" at small end)	Grade 1: \$867/MBF Doyle Grade 2: \$677/MBF Doyle Grade 3: not enough data	I & II
Paulownia Logs	Min. length 2 meters + trim allowance (6' 6"+trim) and Min. DIB 8" at small end (Must be slow grown – prefer 8-10 growth rings per inch); season Oct- April	Grade 1 \$850	I, II III
Pine Pulpwood	Pine: Diameter, length, and species may vary with purchasing company. Consult firm first before cutting	\$26/ton or \$69.55/cord (5350 lbs/ cord gatewood price)	II & III
Hardwood Pulpwood	Hardwood: Diameter, length, and species may vary with purchasing company. Consult firm first before cutting	\$28/ton or \$81.20/cord (5800 lbs/ cord gatewood price)	I, II & III
Softwood Logs	Length: 8'-16' and min DIB 6" at small end	Prices are dated. No mills surveyed currently list softwood prices. SY Pine: \$200/MBF Doyle White Pine: \$250/MBF Doyle Hemlock: \$180/MBF Doyle SY Pine CNS: \$25/ton	I & II
Veneer Logs	Prime logs only (specifications vary with buyer).	Red Oak: Average \$749/MBF Doyle White Oak: Average \$1,208/MBF Doyle Walnut: Average \$1,531/MBF Doyle Cherry Average \$916/MBF Doyle Poplar Average \$531/MBF Doyle	I, II & III

*Information is taken from a survey of wood-using industries in Tennessee

**Specifications vary with industries

***All prices are regional averages and are delivered prices per MBF Doyle unless otherwise indicated. They are subject to change and will vary locally. ("+" indicates an increase since our last bulletin; "-" indicates a decrease)

Log Price Regions



Hardwood Sawlogs*

Species	Region I	Region II	Region III
Red Oak	Grade 1: \$439- Grade 2: \$332- Grade 3: \$223-	Grade 1: \$503 Grade 2: \$407+ Grade 3: \$318+	Grade 1: \$578 Grade 2: \$471 Grade 3: \$413
White Oak	Grade 1: \$511- Grade 2: \$354- Grade 3: \$230-	Grade 1: \$594+ Grade 2: \$428+ Grade 3: \$364+	Grade 1: \$640 Grade 2: \$488 Grade 3: \$354
Ash	Grade 1: \$348 Grade 2: \$260- Grade 3: \$170-	Grade 1: \$489- Grade 2: \$335- Grade 3: \$287+	Grade 1: \$592 Grade 2: \$483 Grade 3: \$350
Yellow Poplar	Grade 1: \$309+ Grade 2: \$226- Grade 3: \$168-	Grade 1: \$368+ Grade 2: \$271+ Grade 3: \$231+	Grade 1: \$379 Grade 2: \$298 Grade 3: \$240
Walnut	Grade 1: \$471- Grade 2: \$289- Grade 3: \$190-	Grade 1: \$939 Grade 2: \$575- Grade 3: \$520-	Grade 1: \$1,150 Grade 2: \$850 Grade 3: \$533
Cherry	Grade 1: \$343- Grade 2: \$289 Grade 3: \$190+	Grade 1: \$452 Grade 2: \$323- Grade 3: \$273	Grade 1: \$500 Grade 2: \$375 Grade 3: \$323
Hard Maple	Grade 1: \$450- Grade 2: \$343- Grade 3: \$192-	Grade 1: \$550- Grade 2: \$406- Grade 3: \$326-	Grade 1: \$600 Grade 2: \$250 Grade 3: \$300
Hickory	Grade 1: \$356- Grade 2: \$250 Grade 3: \$175-	Grade 1: \$360- Grade 2: \$329- Grade 3: \$259	Grade 1: no data Grade 2: \$463 Grade 3: \$325

Miscellaneous Hardwoods	Average: \$179-	Average: \$233+	Average: \$359+
<i>Increase from last quarter (+); Decrease from last quarter (-)</i> <i>*Specifications: (Length: 8'-16'; and Min. DIB 8 " at small end) Delivered Price</i> <i>Prices quoted are per thousand board feet (MBF) Doyle Rule delivered to mill. Prices will vary greatly depending on many factors such as weather and mill inventories. Prices received for standing timber will be less than the delivered price based on harvest cost, haul cost and buyer profit:</i> <i>Standing timber (stumpage) price = delivered price – harvest cost – haul cost – buyer profit</i>			



Wanted to Buy:

- ❖ **Hardwood Sawmill:** Foreign company with offices in Taiwan, China and Southeast Asian is looking to expand and is interested in purchasing a hardwood mill in the States. For more information, contact Cleo Fu, Agricultural Marketing Specialist with the USDA Foreign Agricultural Service: +886-2-2705-6536 ext. 242; fucwy@state.gov
- ❖ **Loblolly or shortleaf pine for utility poles:** 36 foot to 76 foot in length (length is determined by diameter). Roadside pricing. Call Doug Curry, Bell Timber for specifications and details. 715-418-9333.
- ❖ **Logs for Export:** An exporting company based out of Southern Illinois is interested in buying veneer logs for export. Any information or bid proposals can be e-mailed to swsveneer@gmail.com or call Derek Wilson at 618-559-7568.

For Sale:

- ❖ **SCHAEFER ENTERPRISES OF WOLF LAKE, INC** –Rely on our experience, established in 1967. Used Parts Shipped Daily for Log Skidders, Crawlers, Loader Backhoes, Excavators, Wheel Loaders and Skid Steers. We have many reconditioned engines and transmissions that are Dyno-Tested. Rebuilt winches, final drives and used tires. If we do not have a part – we can locate it for you on one of our three nationwide parts locators
- ❖ **Parts for:** Allis Chalmers, Athey, Bantam/Koehring, Bobcat, Case, Clark, Daewoo, Dresser, Drott, Fiat Allis, Franklin, Hitachi, Hough, Hyundai, International, John Deere, Kobelco, Komatsu, Leihberr, Linkbelt, Michigan, Mitsubishi, New Holland, New Process, Pettibone, Samsung, Timbco, Timberjack, TreeFarmer, VME, Volvo
- ❖ We have many reconditioned engines and transmissions that are dyno-tested, rebuilt winches, final drives and used tires.
- ❖ Contact a parts professional at: (618) 833-5498 or (800) 626-6046. Ask for Andy, Brad Jill, Joe, Kevin, or Matt if buying. Ask for Jerry or Tom if selling.
- ❖ We are located at 4535 State Route 3 North, Wolf Lake, IL 62998.

- ❖ Check out our inventory at – www.sewlparts.com or you may send email requests to parts@sewlparts.com.

Components from a biofuel thermal treatment plant used to make biochar and other products

A partial listing of what is available: Wood chip/sawdust dryer with cyclone; NG/#2 fuel oil/propane furnace; motors, auger assemblies with motors, stainless steel flue gas ducting, conveyors, airlocks, condensers, air handler, flowmeters and other instruments, electrostatic precipitator, stainless steel storage tanks; climate controlled 16' control room trailer with VFDs, HMI, PLC, kWh meters, circuit breakers, considerable power and sensor wiring, etc.

The skinny on this equipment:

- ❖ Biofuel plant used intermittently for research and development over two years
- ❖ All equipment was in good condition and fully operational upon shutdown, and all equipment with the exception of the dryer cyclone and control room trailer have been kept under roof.
- ❖ Pictures and more detailed information available
- ❖ Arrangements can be made to view and inspect the equipment. Location NW Alabama
- ❖ **Buyer pays no sales commissions**

Owner is anxious to sell so make an offer. This is an unusual opportunity for the right party. Seller lost his lease and must move. Lots of good, useful items in good shape and ready to load out. These items can be used in a variety of ways for a variety of purposes.

Contact Phillip Badger, cell phone 256-762-2886, email: pbadger@bioenergyupdate.com

Other:

- ❖ **“Logs, Chips and Lumber Trucking Company:** West Tennessee company specializes in providing trucking services for area loggers, sawmills and papermills located within a 100 mile radius of Paris, TN. We currently have 20 trucks and over 60 trailers in our fleet for quick “drop and hook” service. Flatbed Trailer and Live Floor Chip Trailer services also available. Fully licensed, bonded and insured. Competitive rates. References available. Call Revel Logging, LLC at 731-642-3944 for more information. “
- ❖ **“ATTENTION LOGGERS!** “Waverly Wood, LLC” of Waverly, TN is looking to employ additional logging crews, to log their timber tracts; long-term employment possible. All prospective contractors must have workers’ compensation and general liability insurance. Also, wanting to buy white oak stave logs and tie logs. Please contact: Mike Phillipi, Timber Procurement Manager or Todd Richardson (Office: 931-296-1455; Mobile: 615-418-0276)

The Tennessee Forest Products Bulletin welcomes those items that you are looking to buy or sell in The Trading Post. Contact Debra Dawson: Debra.Dawson@tn.gov; 615-837-5540; 615-837-5003 (Fax) with your submissions.