



SOUTHERN TIMBER MARKET MINI-HISTORY

The Great Recession had a big impact on the North American forest products industry. Housing started plummeting and demand for lumber followed. Timber landowners held on to their timber and just let it grow rather than sell it at depressed prices.

About 30 million acres of southern forest had been converted from natural to planted pine by year 2000. Much of the pine planted in the 1950's with the Soil Bank Program was harvested in the 1980's and replanted. The new Conservation Research Program (CRP) in the 1980's also resulted in more planting of pine. Many of the CRP lands matured about the time of the Great Recession (2007-2008). Now we have an excess of sawtimber in the South.

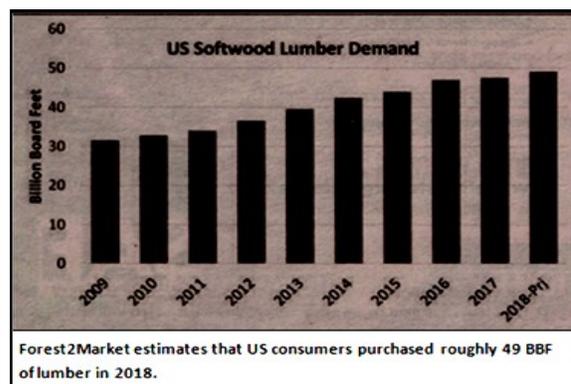
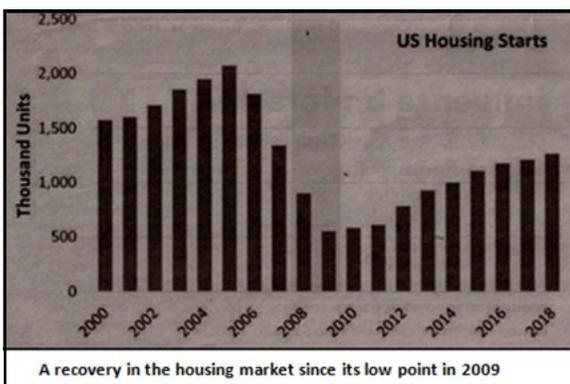
In the meantime, sawmills became more efficient in maximizing salable volume from a pine log and need 1%-2% less wood to produce the same amount of lumber. Southern logs are among the cheapest in the global market and only Brazil has lower delivered sawtimber prices.



Figure 1. South-Wide Regional Timber Price Trends, 2005-2018 (Timber-Mart South 2018)

From 2005 to 2018, southern pine sawtimber dropped from an average of \$40 per ton to about \$25 per ton (almost 40%), not accounting for a further loss for inflation. Record higher pine pulpwood consumption, however, has resulted in an increase in prices from \$8 per ton to \$10 per ton, and hardwood sawtimber increased from about \$20 per ton to more than \$30 per ton.

To get back to 2008 stumpage prices, sawtimber demand or supply decrease would have to become more than 25% above pre-recession levels, which was a time of record levels of housing starts and other demands. New mills, however, are being constructed and, hopefully this will increase demand.



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TEXAS PELLETS

Graanul Invest affiliate Woodville Pellets, LLC submitted the winning auction bid for the assets of Texas Pellets, In. and German Pellets Texas, LLC (collectively, "Texas Pellets"). The assets include the Woodville, Texas pellet manufacturing plant and its Port Arthur, Texas port terminal. The estimated manufacturing capacity of the wood biomass pellet plant is 450,000 MT of pellets per year. The Port Arthur terminal has a total storage capacity of 68,000 MT.

LAND EXPECTATION VALUE

According to a study in the Journal of Forestry (may 2018), the land expectation value on site index 80 (age 25 years) timberland in Texas was \$497.77 per acre in Texas before taxes and was \$385.88 per acre after property, state, and federal taxes. This assumed a five percent (5%) real discount rate. Arkansas had the highest after tax LEV (\$547.21) and Georgia had the lowest (\$366.89). The site burden for low-productivity sites (SI 60) is much higher than for high (SI 80) and medium (SI 70) sites.

The study assumed mechanical site preparation cost of \$157.32 per acre, loblolly pine bare root hand planting cost of \$51.83 (623 seedlings/acre) and seedling cost of \$0.087 per seedling, for a total of \$263.35 per acre. Stands were thinned when basal area exceeded 120 ft²/acre, but no earlier than age 12. Stands were thinned to a 70 ft²/acre basal area.

Land Expectation Value (LEV) is the best estimate of timberland value. It is used to calculate the net discounted cash flow from an infinite series of timber rotations. Federal income taxes lower the revenues and have the largest impact on LEV. This has resulted in the movement of timberland ownership into Timberland Investment Management Organizations (TIMOS) and Real Estate Investment Trusts (REITS) which pay no income taxes.

WATER BARS

If you are making new wood roads, be sure to angle them across the slope. If you make them straight down the slope they may turn into an eroding water channel. Water bars can also slow the water's momentum by diverting water to the slope of the road. These water bars are merely small berms or drainage diversion ditches angled across the bed of the road.

Texas Forestry Best Management Practices recommend placing water bars at an angle of 30 to 45 degrees to the road. The waterbars merely turn the runoff, they don't dam it. A road with a 10 percent grade would normally have waterbars every 80 feet.

The uphill end of the bar should extend beyond the side ditch line of the road and tie into the bank or wing ditch, if present. Waterbars without cross drains should be used on sandy, erodible soils or other sensitive areas.



<https://tfswater.blogspot.com/2012/08/the-basics-of-waterbars-and-wing-ditches.html>

RAKING AND BURNING

Pine needle raking and prescribed burning are common practices in longleaf pine stands on the coastal plain sites in the Southern United States, and the U.S. Forest Service is conducting studies to gauge the effect of these practices on the productivity on these sites. Repeated litter removal by raking and organic matter burning can affect the already low fertility of these sites. Although forest fertilization may alleviate some nutrient losses, it may not be enough to totally compensate for the change in chemical properties in the soil. Further research is being conducted to reveal the effect of these practices on tree growth.

WALNUT CATERPILLAR

East Texas rains often lead to outbreaks of the walnut caterpillar (*Datana integerrima*), a common defoliating insect of commercial pecan orchards. The larvae feed only on trees of the walnut family which includes pecans, hickories, and walnuts. Egg masses are laid on the underside of leaflets and the reddish larvae hatch and feed on the leaves, starting on the top of the canopy. The caterpillars mature and move down the trunk to molt. These clusters of caterpillars on the trunks can be controlled with oil sprays, soapy water, or wettable Sevin TM (carbaryl). Full canopy sprays use the bacterium *Bacillus thuringiensis*. The loss of foliage however, is usually temporary.



Egg mass of walnut caterpillar on underside of leaf
forestryimages.org



Cluster of walnut caterpillars
ddis.ifas.ufl.edu

2,600 YEAR-OLD BALD CYPRESS DISCOVERED

A bald cypress tree was recently found in North Carolina to be more than 2,600 years old, putting it at fifth-oldest tree in the world. The oldest is a Great Basin bristle cone pine in California that is 5,066 years old. The cypress is located along the Black River on property in the Three Sisters Swamp owned by the Nature Conservancy.

The tree rings help reconstruct periods of flooding and drought in the area as cypress is extremely sensitive to climate, especially rainfall. The tree has been dated to 605 B.C., and scientists think there may be some cypress trees in the area that are even older.

STORM DAMAGED YARD TREES

Can your tree be saved after it has been damaged in a storm? Here are some pointers to consider:

- Is the tree a desirable species for its location?
- Is the tree basically healthy otherwise?
- Is there significant bark loss?
- Are there big wounds?
- Is at least 50 percent of the tree's crown (branches and leaves) still intact?
- Has the leader branch been lost?
- Are major limbs broken?

Are there remaining branches that can form a new branch structure?

You can get more detailed help at bit.ly/AfterStormpdf

TEXAS MIGRATIONS

According to the Texas Nature Conservancy, the top five must-see migrations in Texas are:

1. Golden Cheek Warblers

These black, white, and gold song birds only breed and hatch their young in Ashe-juniper trees in the Edwards Plateau. They migrate to Texas in early March and depart in mid-June to wintering grounds in Central and South America.

2. Whooping Cranes

The cranes come from Alberta to a few locations along the Texas Gulf Coast during the winter.

3. Mexican Free-Tailed Bats

These warm-blooded mammals come near the small town of Manson each May to give birth before returning to Mexico in October.

4. Black-Capped Vireos

The Vireo arrives in Texas to breed between late March and mid-April. They depart for Mexico by mid-September.

5. Monarch Butterflies

North America's eastern Monarch population migrates south, hugging the Gulf Coast of Texas down into Mexico.

FORESTRY LAWSUIT

A lawsuit has been filed in Texarkana federal court accusing James and April Thompson of stealing in excess of \$4 million from April's employer, Kingwood Forestry Services. The lawsuit alleges that April submitted phony invoices to Forest Investment Associates (FIA) payable to her husband.

WEBSITES

Forestry herbicide prescriptions are now available on a new web app which eliminates the "guess work" of determining the best herbicide prescription to control unwanted vegetation for many typical forest management situations in the Western Gulf region of the U.S.

You can find this app at:

<https://texasforestinfo.tamu.edu/HerbicideDSS/main>

Need help finding a suitable tree for your urban environment? Check out the Urban Forest Ecosystem's searchable index at:

<http://selectree.calpoly.edu/>

Not sure which landscape trees to plant? Check out the Tree Wizard. The best tree will be recommended for you.

<http://www.arboday.org/shopping/trees/treewizard/>

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