



TREE Cookies Etc.

Fall 2008

Volume 4, Issue 1



Calendar

- Sept. 4 & 29, 2008
[Woody Bioenergy in Virginia Symposia](#)
Abingdon and Petersburg, VA
- Sept. 18, 2008
[NoVA Urban Forestry Round Table](#)
Reston, VA
- Oct. 2008
[32nd Annual fall "Bus Tours"](#)
Nottoway, Montgomery, Giles, Rockbridge and Essex Counties, VA
- Oct. & Nov. 2008:
[Handheld GPS Computer Training](#)
6 different workshops, 2 locations, Maryland Cooperative Extension
- January 2009:
[Northern VA Bioenergy Conference](#)
Details Pending.

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tree cookie (trē' kookē) n. a cross sectional slice of a trunk or branch. The concentric rings tell not only the age of that part of the tree, but also a story about the environmental conditions, history, and dynamics of that tree, in that place.

TREE Cookies Etc. n. 1. a free electronic newsletter dedicated to tell the story of forest stewardship, tree care, and natural resource management. 2. to help people make best decisions regarding the resources entrusted to them.

Dear Reader,

I hope your summer has been productive and safe and included some outdoor activity that improved the environmental integrity of your property, yard, neighborhood, or maybe even some public land.

Everything we do has consequences. Green talk is doing a good job of reminding us of this fact. Large scale ideas seem to be getting most of the press but what we do right where we live has a clear and present impact on the environment. Conserving soil, choosing products that come from renewable resources, managing for diversity, and controlling invasive species... these are some of the things touched on this issue and that we all have the opportunity to "touch." -AKD

Agro Forestry: Something Old, Something New

By: Stephen D. Sides, Forestry and Natural Resources Intern -- VCE

"The best friend on earth of man is the tree: when we use the tree respectfully and economically we have one of the greatest resources of the earth."

-- Frank Lloyd Wright

Trees surround us, and I'm not just talking about the beautiful Virginia forests or the "Back 40". For centuries – no, for millennia mankind and civilization has depended on trees and timber as fuel for warmth, construction material for houses, for paper, as both a muse and a palate for the arts, and for their beauty in the forests. However, when one imagines a modern farm livestock grazing in open fields and crops stretching out in endless, unbroken rows come to our mind's eye. While timber is still a common part of modern farming, the living, growing tree has been removed from, or is supposed a hindrance to, many present farming practices. However, current research, modern science, and new market demands have rediscovered the economic and ecological benefits of agriculture and forestry integration, a.k.a. Agroforestry. And, though agroforestry does take advantage of modern research, it's actually a hybrid of modern science and farming practices that are as old as dirt.

Known out West as "Living Snow Fences," **Windbreaks** are probably the most well known of the agroforestry practices. Windbreaks are designed tree groupings planted to fulfill specific objectives. If planted on highways they form natural sound and dust

Continued pg. 3...



Timber Trends – The Tree Farmer’s Secret Weapon

Adapted From: [Branching Out](#) – Vol. 15, No. 2 Spring 2008 Maryland Cooperative Extension

The recent decline in the housing market has captured that attention of most Americans. Monthly housing reports are followed by industry workers and investors looking for clues to predict future trends. However, this particular decline has provided an understanding of how the housing market has influenced the lumber market which, in turn, influenced the timber market. Forest owners are left with questions about timber values for today and in the future.

Experts are unanimous in asserting that the housing market will remain depressed for at least another year. Market declines have happened before, but there’s a lot of fuss over this one because it occurred suddenly, widely, and quickly “jumped” over into the financial markets, leaving behind related dual market declines. This housing decline affect is more than the usual issues of supply and demand. This time, it’s a difficult combination of housing inventory levels *and* a retracting capital market. The demand for Lumber to build those homes had declined and depressed timber prices.

The Reality

The timber market still exists and prices haven’t dropped all that much despite the doom and gloom

Continued on page 4

The Emerald Ash Borer is BACK in Virginia!



Adult Emerald Ash Borer (Above)



Emerald Ash Borer larva (Below)

After a re-discovery of the Emerald Ash Borer at two locations in Fairfax County, VA the Virginia Department of Agriculture and Consumer Services (VDACS) issued a quarantine for the counties of: Arlington, Fairfax, Fauquier, Loudon, and Prince William; and the cities of: Arlington City, Fairfax City, Falls Church, Manassas, and Manassas Park. The quarantine prohibits movement of ash trees, untreated ash lumber products, and cord wood that could possibly contain the pest.

The insect is a beetle, metallic green in color, which consumes the layer of wood just beneath the bark of ash trees. Though devastating to ash trees, it does not pose a threat to other tree species.

What YOU can do to stop the spread of the Emerald Ash Borer:

- ✓ Don’t move firewood! Bring your own wood to your fire site and take home what you don’t burn or, better yet, use wood from the site. Go to www.DontMoveFirewood.org for more reasons not to move firewood.
- ✓ Monitor any Ash trees you own or know of. Contact your local [VA Cooperative Extension](#) office or [VA Dept. of Forestry](#) if you notice “suspicious behavior.”
- ✓ Save your Ash tree seeds! The National Ash Tree Seed Collection Initiative has been set up to store ash seeds that can re-establish ash forests if the U.S. ash forests are completely decimated by the borer.

VDACS Quarantine Details: Articles under quarantine are the emerald ash borer in *any* life state, firewood of all hardwood (non-coniferous) species, Ash (*Fraxinus* spp.) nursery stock, green (non-heat treated) ash lumber, and other living, dead, cut, or fallen material of the genus *Fraxinus*, including wood chips. Any of the articles above may be moved *within* the quarantined area without restrictions. Movement from a quarantined area to a non-quarantined area requires a special VDACS permit. For more information, please contact the VDACS’ office in Richmond at (804) 786-3515 and visit the following USDA site:

http://www.aphis.usda.gov/plant_health/plant_pest_info/emerald_ash_b/regulatory.shtml



Photos Citation: David Cappaert,
Michigan State University,
<http://www.forestryimages.org/>

Agroforestry - Continued

barriers, protecting properties and homes along the highway; more importantly, they block out snow from roads, reducing snow plow costs and keeping roads and highways safer. Windbreaks can also play a vital agricultural role. Both wind and snow damage to crops can be significantly reduced by windbreaks and livestock can find year-round protection from the elements in a windbreak or its lee. Protected crops and stock may provide a greater investment return, and the windbreaks themselves can provide revenue if thinned for lumber or pulp wood or if nut or fruit producing species are incorporated into the windbreak. Besides safe-guarding crops and livestock, windbreaks planted near homes can reduce heating and cooling costs by functioning as an insulation buffer during the winter and a natural shade and cooling source during the summer.

One of the major goals agroforestry farmers have is increased revenue per acre by investment diversity. By their very nature of integration, **Silvopasture** systems can readily meet this objective. The traditional grazing system simply involves open pasture areas or forage. Silvopastures combine livestock grazing pastures with tree timber stands. Like the Native American's "Three Sisters" – corn, beans, and squash – the livestock, trees and forage undergrowth of the stand work in combination to benefit their partners. The animals are rotationally grazed through Silvopasture plots to encourage natural pruning of the lumber trees and reduction of competition; the trees prevent erosion and provide shade for both the livestock (stress reducer) and the forage (natural protection); and the forage is, of course, a major part of the livestock diet, reducing feed costs, and also works as a natural mulch, protecting the trees from weeds and soil erosion. All three components of the Silvopasture system provide the farmer with viable income sources that both increases bio and economic diversity. The trees are a long term, but stable investment; the livestock (cattle, sheep, even goats or swine) are a shorter-term investment that augments per acre income and substantially benefits from the protection of the stand; and the forage understory both aids the growth of the other two components and can be harvested for hay.

Alley cropping is another agroforestry system that increases farm diversity while increasing per acre revenue and integrating long and short term agriculture investments. Lumber and veneer timbers can be high income sources, however, it takes 30+ years for many species to reach marketable maturity. In an Alley cropping system, lumber or veneer trees are planted in long rows with wide spacing in between the rows and traditional agriculture crops are planted in the "alley" spacing between the tree rows. Alley cropping allows land owners to grow trees for long term profit but still maintain immediate profit crops which provide short term incomes and benefit from the protection of the tree rows. The trees reduce wind and sun stress upon the crops, minimize field erosion, and help farmers utilize their fields' nutrients more efficiently. Oak, walnut, ash, and pecan are popular timber species choices, while companion crop possibilities include corn, wheat, or other grains; fruit trees or bushes; soybeans, peas; hays; Christmas trees or landscape trees. Nuts gathered from the timber trees can augment annual profits.

Forestry Factoid

Rubber, a tropical tree product, got its name from the 18th Century scientist Joseph Priestly, who observed it being used to rub out pencil marks.

Besides Windbreaks, Silvopastures, and Alley Cropping, Virginia farmers may employ Riparian Buffers and Forestry Farming systems to further increase income and economic diversity, improve water quality, supply new specialty markets, and encourage wildlife.

For more information about Agroforestry benefits and practices contact the Northern District Extension Forestry Program or visit the USDA National Agroforestry Center (NAC) website at <http://www.unl.edu/nac/index.htm>. *Working Trees* and *Agroforestry Notes*, two NAC agroforestry information publications, are accessible from the NAC website.



Timber Trends - continued

headlines! Houses are still being built, just not as many. The first reality is that homeowners are inclined to improve upon their current home instead of upgrading to a brand new, bigger home. The remodeling sector is a huge component of the overall wood market and it seems to be holding its own as people are seeking to invest their money into their existing home. The second reality is the bloated inventory levels of the complex lumber industry. Lumber futures are in fact moving upwards, albeit slowly and in small increments. Once this excess inventory works itself clear, the timber markets will quickly respond, and the species in usual high demand will once again be at the forefront of the timber buyers demand curve. With the weak U.S. dollar, the timber market may come back faster than once predicted due to export demands.

The third reality is that the current timber market situation is unusual, but not unique. Pine stumpage prices have, since 1964, drastically jumped up and down from month to month. However, the “real” price of the pine adjusted for inflation using the Consumer Price Index has maintained a much more consistent slope. The hard wood market is similar to the pine market. Timber is a valuable asset as it continues to increase in real value. Timber stays ahead of inflation by increasing in real value, i.e. growth.

The Tree Farmer’s Secret Weapon

Marketing your timber should be based primarily on an educated evaluation of your financial and non-financial goals set forth in your management plan. Making management decisions based on price speculation is taking a gamble. The tree farmer’s secret weapon is *the growth of trees*. Focus on growing healthy trees. The bigger trees are worth more so as time marches onward, so do your trees in both height and girth. Double the diameter of a tree and you will (roughly) quadruple its volume. But keep in mind that trees die. When your trees slow in growth or mortality consumes more volume than what the rest of the trees produce, your asset is declining. Market timber at this decline in your forest instead of “timing the market,” which is rarely successful.

The odds are that you will achieve both your financial and personal goals by staying focused on your overall management plan. The power of compound interest working in concert with the growth of trees all but assures your timber assets will increase in real value with time. So, focus on the fun stuff and grow your trees.

WARNING

Under Virginia law, there is no liability for an injury to or death of a participant in an agritourism activity conducted at this agritourism location if such injury or death results from the inherent risks of the agritourism activity. Inherent risks of agritourism activities include, among others, risks of injury inherent to land, equipment, and animals, as well as the potential for you to act in a negligent manner that may contribute to your injury or death. You are assuming the risk of participating in this agritourism activity.

Landowner Liability Update

The Code of Virginia states that landowners who provide recreation opportunities to the public are exempt from liability for injury or damages providing they do not charge a fee or there is no gross negligence; see *VA Code Section 29-140.2, Amended 1982*. Virginia Code also notes Section § [3.1-796.139](#) that a “Warning” required in the form of a sign that shall be placed in a clearly visible location at the entrance to the agri-tourism location and at the site of the agri-tourism activity. The Warning notice shall consist of a sign in black letters, with each letter to be a minimum of one inch in height. (See official sign text to the left.)



Woody Biomass: Buzz, Boon, or Bust?

Adapted from Sustainable Forestry for Bioenergy and Bio-based Products: Trainers Curriculum Notebook. Hubbard, W.; L. Biles; C. Mayfield; S. Ashton (Eds.). 2007. Athen, GA: Southern Forest Research Partnership, Inc.

Biomass talk is buzzing, but what exactly is it? Does this really represent hope for our current energy concerns or will this fade away as just another fad? It could be some of both. Woody Biomass to create energy and even fuel is not exactly new. For example, many German vehicles during WWII were powered with wood through a process known as gasification to power a slightly modified gasoline engine. Additionally, forest product companies have long used various waste material to heat and generate electricity to meet their own energy needs. While not totally new, the current economic climate and new technologies are changing the reality and potential scale of bioenergy use.

Biomass, in its simplest form, is defined as organic matter renewable over time. Woody biomass is the accumulated mass, above and below ground, of the roots, wood, bark, and leaves of living and dead woody shrubs and trees. These woody biomass materials are primarily comprised of carbohydrates and lignin produced through the photosynthetic process. Woody biomass can be used for generating electricity, producing biofuels, and making biochemicals such as adhesives, solvents, plastics, inks, and lubricants.

The benefits of using of utilizing woody biomass for bio-based products, particularly energy and biofuels, are many and varied. These benefits are environmental, economic, social, and energy related. Utilization of woody biomass for bioenergy, for example, can help mitigate greenhouse gases, contribute to better forest management, bolster rural economies, and reduce dependency on foreign oil.

Rising fuel costs, uncertainty about energy supplies, dependence on foreign energy sources, and concern about global climate change and air quality make renewable natural energy alternatives, such as that produced from woody biomass, more attractive. In fact, the U.S. can reduce its dependence on nonrenewable energy feedstocks, reduce wildfire risk, offset greenhouse gas emissions, mitigate declining pulpwood markets, enhance rural economies and improve forest health and sustainability by simply increasing the utilization of forest biomass.

Principal sources for woody biomass in Virginia are harvest and mill residues; urban waste wood, small diameter trees; cull trees; trees damaged by wildfire, insects, and disease, and short rotation woody crops.

For more information on woody biomass, visit: <http://www.forestbioenergy.net/>

FORESTRY FOR THE BAY

Web Watch

Would you like to see more wildlife on your property? How can harvesting timber provide you income while improving the health of your land? Are your woods cleaning your drinking water and increasing your property value? Will your woods last for future generations to appreciate?

While woodlands are natural ecosystems, they need to be properly managed to maintain their health and maximize their productivity. No matter how many acres you own the action you take in your woods directly affects its ability to provide services that benefit you, your community, and the environment. *Forestry for the Bay* is a free and voluntary membership program designed for landowners who want to improve the vitality of their woodland or would like to restore woods to their property.

For more information visit *Forestry for the Bay* at:
www.FORESTRYFORTHEBAY.org



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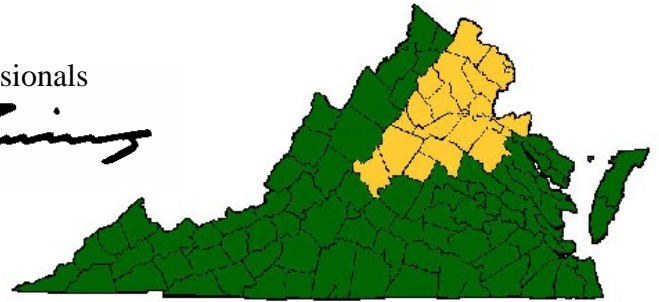
Date: September 1, 2008

To: Citizens, Landowners, and Natural resource professionals

From: Adam K. Downing

Extension Agent, Forestry & Natural Resources

Northern District



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