



➤ **Money Really Does Grow on Trees!**

Privately owned forestland in Augusta County represents the largest economic value in the forest industry. Roughly 1/3 of Augusta County is publicly owned by USFS, National Park Service, Virginia Department of Game and Inland Fisheries, and the Commonwealth of Virginia. The other 2/3 of Augusta County is privately owned. Of the 90 harvesting operations that have occurred in Augusta County in the last year, over 95% occurred on private land. Harvesting revenues alone generated in the County totaled \$1.2 million from



1986-2001 (VDOF), and have remained high since then. The total economic benefit of the forest industry in Augusta County is over \$283 million dollars (VDOF, 1999).

The forest industry relies heavily on non-industrial private landowners to provide the wood products our society depends on. Augusta County will continue to rely on privately owned forestland to provide forest products. It is important for forestland owners of Augusta County to be able to manage their forests to continue to provide wood products to our society, as well as other benefits such as watershed protection, wildlife habitat, and recreational opportunities. The forest industry in Augusta County has a positive local economic impact as well as an international impact. Much of the smaller wood harvested in the county is hauled to MeadWestvaco for manufacturing paper products, and a large portion of the sawtimber hauled to Blue Ridge Lumber is shipped to European markets.

AUGUSTA COUNTY FOREST ECONOMIC IMPACT

Direct Revenue.....	\$167,589,370
(primary and secondary industries)	
Direct Employment (# of jobs).....	1016
Total Employment from Forestry-Related Businesses in Augusta County	2592 jobs!
Indirect Revenue:	\$283,638,863

Not counted in this analysis: Outdoor recreation contributes to the economic impact of Augusta County's forests. People come here to visit our National Forest Land, our National Park Land, and our State Game Lands. They buy specialized

outdoor equipment from local businesses, and eat at our local restaurants. More economic benefits: Our forests act as "sponges" to help reduce stormwater management costs, waste-water treatment costs, and flooding damage to communities. **Patti Nylander, Augusta County Forester, Virginia Department of Forestry 540-363-7002**

➤ **URBAN TREES AND COOLER WATER?**

Could water temperature be a factor in the recent fish kills in the Shenandoah? Maybe. Could planting more urban trees help? A 2006 study by Dr. Tom Benzing of James Madison University showed that the temperature of the Shenandoah River, as measured at the intakes of municipal water treatment plants, has risen as much as 7 degrees F over the past 15 years. This temperature increase could affect spawning times, as well as survival of disease organisms in the river. Dr. Benzing suspects that land use, especially paving and roof area, and other human impacts – for instance, the amount of water we warm up in our homes and businesses, could



contribute to this warming.

According to an article in the Bay Journal, (December 2006), "trees take a bite out of the urban heat island, where buildings, paved

surfaces, and automobile engines create air temperatures that are 2 to 10 degrees hotter than rural communities". Bottom line: Keep on planting trees!

➤ **Native Trees and Shrubs**

The Headwaters District is happy to offer small quantities of native tree seedlings during our annual

tree sale, and we also encourage landowners to order larger quantities of trees directly from the VDOF nursery in Crimora. The Virginia Department of Forestry has more than 45 species of tree seedlings for sale. Well suited for Virginia soils and climate, Virginia's two tree nurseries produce more than 35 million seedlings annually. You will find the catalog and order form at www.dof.virginia.gov.



➤ Jamestown Cherrybark Oaks

2007 marks the 400th anniversary of the founding of the Jamestowne Colony, and the VDOF nursery is growing Jamestown Cherrybark Oak seedlings from acorns hand-collected on Jamestown Island. These 2-year old seedlings are available at either the VDOF nursery or the Headwaters tree sale at the same price of \$5.00 per seedling. (Headwaters minimum = 3, VDOF minimum = 5 seedlings). Historical records indicate that the Cherrybark Oaks were among the most prized discoveries of Captains Christopher Newport and John Smith when they arrived on the island in 1607. Colonists used the straight-grained tree for everything from bateau paddles to simple furniture. They also shipped back to England tons of boards they cut for use by craftsmen there to build fine furniture and buildings.

➤ Forestry Cost-Share Programs

VA State BMP Program

- **Reforestation of Erodible Land** -
 - \$175/acre/conifers.
 - \$250/acre/hardwoods.

-**Woodland Erosion Stabilization** –75% of eligible cost for land shaping and permanent vegetation on critically eroding areas on forest harvest sites.

RT – Reforestation of Timberlands provides cost-share funds to establish pine species. The payment rate depends on the species planted. Minimum acreage requirement of 5 acres. Sign up at the Virginia Department of Forestry after May 1st Projects covered: Field plantings, reforestation sites following harvest, some site-preparation practices, release spraying of pine stands.

CREP – The Conservation Reserve Enhancement Program is designed to help farmers take farmland adjacent to streams out of

production and establish forested riparian buffers to improve water quality. CREP provides cost-share money to establish alternate water sources, build fencing to keep cattle out of streams, build stream crossings if necessary, and plant trees along the stream. The farmer will also receive a rental payment for a period of either 10 or 15 years for the acreage taken out of production. Continuous sign up: Farm Service Agency and NRCS office (Verona) Projects covered: Establishment of alternate water source, Fence building, Tree Planting. Note: CREP also has grass buffer and easement options.



A Buffer Note from Bobby Whitescarver, NRCS

December 31st, 2007 will be last day to sign up for CREP. CREP is the “Enhanced” Conservation Reserve Program offering up to 115% reimbursement for installing streamside buffers and excluding livestock from this vital landscape. This is the program that also offers \$84.20 per acre per year in rent.

To date there are 228 contracts in the Headwaters District covering 1,962 acres. It has been the most popular conservation program in the District's history so if you want get on board you need to sign up this year.

One of our local large animal veterinarians told me that *“clearly, at least 50% of all cattle diseases in the Shenandoah Valley are transmitted through the fecal-oral pathway”*. Simply put, this means that cattle drinking the same water they defecate in, is not healthy. One way to improve your herd health is give them cleaner water and the most cost effective way to do this is by enrolling in CREP.

EQIP – Environmental Quality Incentive Program can provide funding to various ranked projects in forested areas. Properties with Stewardship Plans rank higher than properties without written Stewardship Plans. Continuous sign up at the Natural Resources Conservation Service in Verona. Ranking cutoffs usually begin in late January.

➤ Headwaters Forestry Awards

Each year in October, Headwaters recognizes individuals who have made the extra effort to practice best management, and add conservation practices to their farming and forestry professions. This year, **Doris True** received the Forest Stewardship Award for her farm's forest management. **Joseph Murray**, Assistant Professor of Biology at Blue Ridge Community College, was awarded the Urban Forestry plaque for his arboriculture, arboretum and education work. **Flint Brothers Logging** received a special commendation for never having an offense in their timber harvesting, while caring for the land and water.

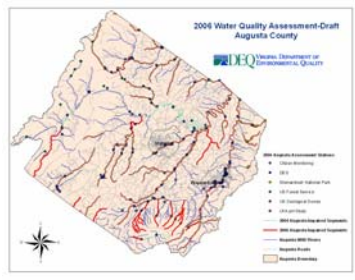


Doris True

Joe Murray

➤ Joelle Hackney joins Headwaters Team

Headwaters is pleased to have a new conservation technician exclusively dedicated to agricultural best management practices in Augusta County watersheds with impaired designation – those which do not meet minimum state water quality standards. (highlighted on the map below.) Joelle grew up in Sherando, and graduated from Eastern Mennonite University with a degree in International Agriculture.



➤ Watershed Headlines

Back Creek E.coli Bacteria Study

The primary reason that many of our streams do not meet minimum water quality standards is an overload of fecal coliform bacteria, which only come from the intestines of warm-blooded animals. Our local monitors have begun a study of seven sites along Back Creek, from Middlebrook to Swoope, to

get a more detailed picture of the bacterial problem. Using procedures and materials from the VA Department of Environmental Quality, these volunteers will sample and culture the Escherichia coli bacteria from these sites every two weeks for the next eight months. This data will help track trends as many landowners practice their best management. Perhaps Back Creek will be a success story, with only voluntary action.

Mossy Creek Watershed Meeting

There will be a Mossy Creek Targeted Watershed Public Meeting and Ice Cream Social on March 13th, at the North River Elementary School, from 7:00-8:30 p.m. This meeting is co-sponsored by the Headwaters SWCD and North River Ruritans, for all area farmers and landowners to share ideas on the implementation of Agricultural Best Management Practices in the Mossy Creek Watershed. Families welcome!

➤ Headwaters Education Outreach

A new Watershed Experience for 6th graders at Grand Caverns includes stations in alternative energy, soils and "Living South River" labs. The Living South River labs are being developed in partnership with the South River Science Team, DuPont, Springdale Water Gardens and the VA Department of Game and Inland Fisheries. For 2nd grade field trips to Augusta Springs, or 4th grade trips to Marl Creek (McCormick Farm), visit the Headwaters website. <http://headwaters.vaswcd.org>.

➤ Envirothon

Headwaters will sponsor Envirothon in spring of 2007, when the topic will be "**Alternative Renewable Energy**". A workshop for coaches and students will be held on February 10th, and will include a solar lunch, tour of JMU alternative energy programs, a presentation of "Science on a Sphere" by Dr. Tom Benzing, in addition to field studies in Forestry, Wildlife Aquatics and Soils. For more information about forming a team, contact the Headwaters office.

Need a Conservation Speaker? Civic or classroom conservation programs are available, free of charge, and tailored to your needs.

Volunteer with the Earth Team! Join the water monitoring team, help host field trips, or become involved in service projects.
Sandy.Greene@va.nacdnet.net.

➤ Upcoming Events

Augusta County Draft Comprehensive Plan

Public Input meetings: January 29, Buffalo Gap High School, January 30, Stewart Middle School, January 31, Stuarts Draft Middle School, 7 p.m. Find the draft plan at your nearest library, or on the web at www.co.augusta.va.us. **Written comments welcome until February 5th.**

Sustainable Timber Management Workshops,

February 20, 27 and March 6th, Augusta County Government Center. More info: Matt Yancey, VA Cooperative Extension 540-564-3080.

Waste Solutions Forum: “Innovative Environmental Technologies Symposium”,

February 22, 8-4 in Harrisonburg. Shenandoah Resource Conservation & Development Council. More info: Jennifer Howard 540-248-3321.

George Washington/Jefferson National Forest Plan public meeting. Rockingham County Government Center. March 10th, More info: District Ranger Elwood Burge, 540-432-0187

Mossy Creek Targeted Watershed Meeting

March 13th, North River Elementary School 7:00-8:30. More info: Joelle Hackney, 540-248-6218 (ext 3)

Tree Seedling Sale Orders due by March 16th, Pickup March 24th, 9 – Noon, Augusta County Government Center. More info: Sandy Greene, 540-248-6218 (ext 3).

If you would rather read the Headwaters newsletter on the website (<http://headwaters.vaswcd.org>), and save paper and postage, contact us at 540-248-6218, ext. 3 or e-mail cathy.perry@va.nacdnet.net

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We work with the people who work the land.

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➤ **Inside this Newsletter**
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