



North Carolina Forest Stewardship

News

Fall 2011

Owen named assistant commissioner of NCDA&CS

RALEIGH - Agriculture Commissioner Steve Troxler has named State Forester Wib Owen as an assistant commissioner of the N.C. Department of Agriculture and Consumer Services.

Owen oversees the N.C. Forest Service, which is responsible for developing, protecting and managing forest resources in the state. Programs include reforestation services, forest fire prevention and suppression, and insect and disease control. The agency also is involved in seedling production at state nurseries, long-range forestry planning and technical development, water quality controls, urban forestry assistance, training, forestry education and support to volunteer fire departments. The service has about 800 permanent and seasonal employees.



Troxler said he changed Owen's title in recognition of the scope of the Forest Service's responsibilities and the importance of forest resources to the state's agricultural economy. Owen is now a member of the department's executive team, which includes the chief deputy commissioner and three other assistant commissioners.

"It's important that the state forester report directly to me and be able to express his concerns about issues affecting our forest resources," Troxler said. "I have complete confidence in Wib's managerial skills and his knowledge of forestry."

The General Assembly transferred the Forest Service to the NCDA&CS on July 1. The agency previously was part of the Department of Environment and Natural Resources. A 33-year veteran of state government, Owen has served as state forester since 2007. He previously was assistant chief of the Wildlife Management Division of the N.C. Wildlife Resources Commission. He holds a bachelor's degree in forestry and master's degrees in wildlife biology from N.C. State University. He is a registered forester and member of the Society of American Foresters.

Walnut Thousand Cankers Disease Alert

Mary Ann Hansen¹ and Elizabeth Bush¹, Extension Plant Pathologists

Eric Day¹, Extension Entomologist

Gary Griffin¹, Forest Pathologist

Norm Dart², State Plant Pathologist

¹Virginia Tech, ²Virginia Department of Agriculture and Consumer Services

First occurrence of Thousand Cankers Disease of Black Walnut (*Juglans nigra*) in Virginia:

On June 24th, 2011, the first case of thousand cankers disease of black walnut was found in two trees with severe epicormic branching on the lower trunk and advanced decline in Chesterfield County, Virginia. Presence of the vector and pathogen associated with this disease, the walnut twig beetle (*Pityophthorus juglandis*) and the fungus *Geosmithia morbida*, was confirmed in the samples. This is the first report of thousand cankers disease of black walnut in Virginia. The Virginia Department of Agriculture and Consumer Services (VDACS) is conducting a delimiting survey to determine the extent of the infestation surrounding the positive find. Initial delimiting survey work has found additional trees with thousand cankers disease in Chesterfield and Henrico Counties.

The first report of thousand cankers disease of black walnut east of the Mississippi River (<http://news.tennesseeanytime.org/node/5684>) was previously reported when the Tennessee Department of Agriculture announced the occurrence of the disease in black walnut trees in Knox County, Tennessee in August 2010. Although this lethal disease has been present in parts of the western U. S. for at least a decade, it had not previously been reported east of the Mississippi River in the native range of the black walnut. The presence of this devastating disease in the southeastern U. S. poses a great risk to black walnut trees in their native range. Virginians should be on the lookout for this disease in black walnut trees.

General information on thousand cankers disease:

Thousand cankers disease is caused by the newly named fungus, *Geosmithia morbida*, which is vectored by the twig beetle, *Pityophthorus juglandis*. When the beetles form galleries beneath the bark of walnut trees, they carry the fungus with them. The fungus forms dark cankers in the phloem around the beetle galleries. The number of beetles that attack an individual tree is enormous and the number of cankers that form is correspondingly large. On black walnut the disease is lethal, causing cankers that coalesce and eventually girdle the trunk and branches. Hickory and pecan (*Carya* species) are resistant to thousand cankers disease. English walnut (*Juglans regia*), the species primarily responsible for commercial nut production, seems to be resistant. More work on the resistance of various tree species is ongoing.



Early canopy symptoms of thousand cankers disease (photo by Ned Tisserat, courtesy of Bugwood Network).

Symptoms of thousand cankers disease:

Despite the graphic name of this disease, cankers are not the most obvious symptom. Initial symptoms of infection may be subtle. Leaves may flush in spring, but then suddenly wilt. Gradually the upper branches die back. Cankers are hidden beneath the bark and can only be seen in the early stages of disease when a thin layer of bark is cut away. A dark brown stain is apparent in the phloem just beneath the outer bark. The discoloration does not extend into the xylem (the wood), so care should be taken to avoid cutting too deeply when examining trees for cankers. Beetle galleries are also present in affected phloem tissue and tiny exit holes may be present, especially in branch crevices. Beetles are approximately 2 mm long, so exit holes are very small and may be hard to see. On smooth barked branches the exit holes are easier to see than on branches that

have developed rough bark. Trees typically die about two years after the first symptoms are noticed, but this is thought to be many years after the initial infection actually occurred. Trees may resprout from the base, but sprouts are also

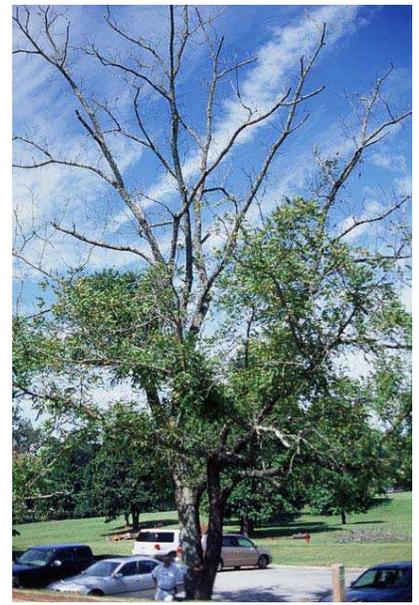
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infected and killed.

History of the Disease:

Thousand cankers disease was first identified in 2001 in infected black walnut trees in Colorado; however, mortality in black walnut stands was observed in Oregon in the presence of twig beetles as far back as the 1990's, so the disease was likely present earlier than 2001. Both the beetle and the fungal pathogen are thought to be native to North America, so the epidemics that occurred in black walnut at that time were not due to an introduced species. On the contrary, the epidemic in black walnut is thought to be due to an expansion of the twig beetle's host range, which followed the introduction of the black walnut, an eastern species, to western states. Previously, Arizona walnut (*Juglans major*) was the main host of the twig beetle and the canker disease did not occur on this host species. The discovery of thousand cankers disease in black walnut in Colorado raised the strong risk that the disease and its vector could be introduced to the native range of the black walnut east of the Mississippi. Such an introduction could easily occur through transport of infected walnut products, especially infected logs or firewood. The lack of resistance in the native population of black walnut could mean rapid spread of the disease in the eastern forest.



Later stage of thousand cankers disease
(photo by Gary Griffin).

Preventing the spread of thousand cankers disease:

Currently there are no known control measures for thousand cankers disease of black walnut. Because transport of logs and/or firewood is one of the main avenues for spread of the disease, several states have enacted quarantines restricting the movement of black walnut logs. The movement of timber and nursery stock is also restricted by these quarantines. Education of the public about the need to prevent the transport of logs and firewood is also of paramount importance. To prevent the spread of thousand cankers disease:

- **Don't transport walnut logs, lumber or firewood.** If you are camping, buy firewood from a local source. Similarly, firewood from the camping location should NOT be transported home. Leave any extra firewood at the camping location.
- **Don't buy walnut (logs, lumber, firewood) from an unknown source.** If you purchase wood from a door-to-door or online vendor, make sure you know where it comes from. If it is not from a local source, don't buy it, and make sure you educate the vendor about the potential for transporting lethal plant pathogens and insect pests on walnut wood.
- **Watch for symptoms of thousand cankers disease in your black walnut trees.** If you suspect your black walnut tree may have thousand cankers disease, contact your local county Extension agent (<http://www.ext.vt.edu/offices/index.html>) for more information on submitting a plant sample to the Virginia Tech Plant Disease Clinic for diagnosis.

Tips for field diagnosis:

- Look for clusters of dead or dying black walnut.
- Look for dieback in the tops of black walnut trees.
- Carefully slice away a thin layer of bark on live branches or the trunk of suspect trees. If you notice beetle galleries or a dark brown stain in the phloem, the tree is suspect for the disease.

Sampling black walnut for thousand cankers disease:

- Cut affected, but still live branches or sections of branches that are between 1-inch to 4-inches in diameter. Smaller branches rarely have the beetles or the cankers and larger pieces of wood present shipping and processing problems. Try to get branches that have beetle holes or galleries.
- Do not remove the bark on branches for submission. Underlying wood often discolors naturally when bark is removed and this can make the cankers difficult to detect.
- Place branch samples in two ziplock-style plastic bags, one inside the other, for submission to the local county Extension office. **Samples submitted by the public** should be taken to the local county Extension office (refer to: <http://www.ext.vt.edu/offices/index.html>) for mailing to the VT Plant Disease Clinic and Insect ID Lab. You will be asked to complete a disease diagnostic form for mailing with the sample. Please take time to fill out the form completely. If

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you find small, dark brown beetles less than 1/4" long, place them in alcohol in a vial and complete an Insect ID form for submission with the sample. Samples will be mailed to the respective labs by the county office.

Problems that could be confused with thousand cankers disease:

- Environmental stresses, such as frost injury or drought can cause dieback in black walnut, as well as other tree species.
- Mechanical damage to the base of the tree by lawnmowers or soil moving equipment could cause dieback in black walnut, as well as other tree species.
- Neonectria canker, a different fungal disease, could be confused with thousand cankers disease, but cankers caused by the Neonectria fungus are very different in appearance from thousand cankers disease cankers. With Neonectria canker, the bark sloughs away from the surface of the cankers naturally and the sunken cankers are very visible. Edges of Neonectria cankers also typically have ridges of callus tissue that form each year and are apparent without having to cut into the tree. Older Neonectria cankers have a target-like appearance.
- Phytophthora collar rot is a disease caused by a pathogen that attacks at the soil line. Dark brown discoloration occurs under the bark, but is only present at the base of the tree, whereas with thousand cankers disease, the cankers are present all over the tree.
- Root and butt/trunk rot diseases can also cause dieback on black walnut.



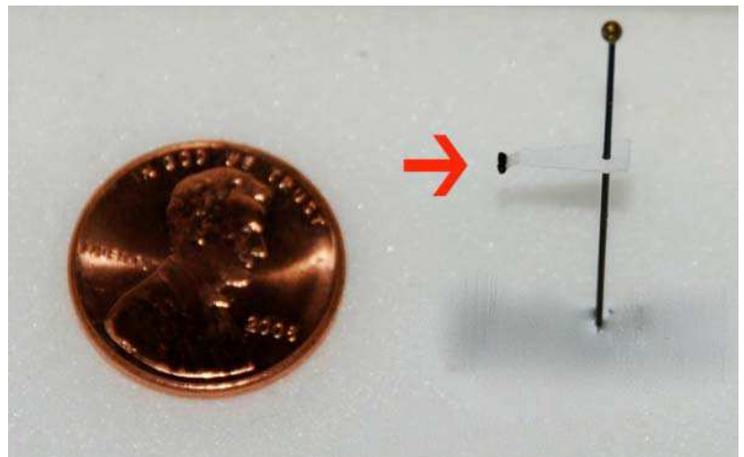
Cankers caused by the fungus *Geosmithia morbida* (photo by Elizabeth Bush).



Twig beetle galleries associated with thousand cankers disease (photo by Whitney Cranshaw,



The walnut twig beetle, *Pityophthorus juglandis* (photo by Eric Day).



Small size of walnut twig beetle, *Pityophthorus juglandis* (photo by Eric Day).

For further information on this disease, the following web sites may be helpful:

- <http://www.ppd.l.purdue.edu/PPDL/pubs/walnutthousandcankersdisease.pdf>
- <http://tn.gov/agriculture/regulatory/tcd.html>
- <http://www.thousandcankerdisease.com/>
- <http://www.dontmovefirewood.org/>

Note: that this disease is an emerging situation. We will send out updates as we acquire more information on this disease.

Former Wildlife Executive Director Receives Wildlife Conservation Honor

By Jodie B. Owen

RALEIGH, N.C. (Aug. 25, 2011) – Richard Hamilton, who served the N.C. Wildlife Resources Commission for 37 years, most notably as the executive director from 2004 to 2007, was honored with the Thomas L. Quay Wildlife Diversity Award at the agency’s business meeting today.

Gordon Myers, executive director of the Commission, presented Hamilton with the award, along with a framed print and plaque.

“The Quay Award recognizes individuals who make outstanding contributions to wildlife diversity in North Carolina and who are leaders in wildlife conservation,” Myers said.

“Recipients are not recognized only for a single contribution but rather for a series of contributions that reflects a dedication to their vocation and their passion for conserving all species of wildlife in their natural habitats. They are also characterized by their mentorship of others and this year’s recipient, Richard B. Hamilton, embodies all of these qualities.”

While Hamilton’s career at the Wildlife Commission focused mainly on game animal conservation and management, he was the driving force behind many agency actions that benefited nongame animals, such as the formation in 1986 of the Nongame Wildlife Advisory Committee, an 18-member committee that advises the agency on nongame and endangered wildlife issues across the state.

He also helped initiate the Cardinal Foundation, a non-profit organization that works on behalf of the Wildlife Commission to support charitable, scientific and educational enterprises promoting the conservation and appreciation of wildlife and their habitats in the state.

Among key projects that flourished under Hamilton’s leadership and that now benefit all North Carolinians who appreciate the outdoors are the development of wildlife viewing areas where the public can observe wildlife in their natural habitats and the formation of the N.C. Birding Trail, a partnership project that established a driving trail linking great birding sites across the state.

He led the agency’s efforts for legislative approval of a specialized nongame wildlife vehicle license plate and income tax check-off for taxpayers to designate a portion of their refunds in support of nongame wildlife conservation. To date, the Commission’s Wildlife Diversity Program, which conducts projects on behalf of nongame wildlife, has received nearly \$10 million from tax check off donations and license plate purchases.

Perhaps his most significant accomplishment for wildlife in North Carolina was his avid and vocal stance against a proposal by the U.S. Navy to construct an outlying landing field adjacent to the Pocosin Lakes Wildlife Refuge in eastern North Carolina, one of the premiere wintering sites on the East Coast for migratory and resident waterfowl. Due to the tireless tenacity of Hamilton and other conservation leaders to prevent the destruction of this pristine habitat, the U.S. Navy announced in 2008 that it was abandoning plans to build the field.

“In the truest sense of the term, Dr. Quay is a lifetime sportsman, understanding the inherent value of all wildlife and the importance of managing for both game and nongame animals. As testimony, he was one of the first to purchase a sportsman’s license even though he didn’t hunt or fish,” Hamilton said. “While a student, I had a lot of interaction with Dr. Quay, and I saw firsthand his love of wildlife and his contributions to wildlife. For these reasons and many others, I am truly humbled and honored to receive this award.”

Hamilton is the sixth person to receive the honor, which recognizes individuals who make outstanding contributions to wildlife diversity in North Carolina and who are considered leaders in wildlife resources conservation. The first recipient was Dr. Quay himself, a retired professor of zoology at N.C. State University and self-described “full-time volunteer and unpaid environmental activist.” Dr. Parnell, professor emeritus of biological sciences at the University of North



Photo by Craig Holt, North Carolina Sportsman Magazine (February 03, 2010)

Carolina Wilmington, received the award in 2007 in recognition of his pioneering research on colonial nesting waterbirds and shorebirds on dredge-material islands. Former Wildlife Commission employee and section manager of the Wildlife Diversity Program, Randall Wilson, received the award in 2008. In 2009, Tom Henson, a retired Wildlife Diversity Program Coordinator with the N.C. Wildlife Resources Commission, won the award. George Burdick, a retired professor and former Wildlife Resources Commission employee, received the award in 2010.

Fledgling Firefighters Fly (AmeriCorps)

In March they were in the classroom learning about wildland fire for the first time. Twenty weeks later they were helping fight a 6,000-acre wildfire. Such was the experience for several AmeriCorps members stationed at Great Dismal Swamp National Wildlife Refuge. The U.S. Fish and Wildlife Service sponsored basic wildland firefighter training for 40 volunteers enrolled in the Perry Point, Maryland campus of the AmeriCorps National Civilian Community Corps.

Ben Riley, from Chicago, was one of the trainees. "I heard wildland fire was one of the options at AmeriCorps," said Riley, 24. "I didn't know anything about it, but I was drawn to the idea. I like working seasonally, travelling and the outdoors" After completing his training and passing a fitness test where he had to walk three miles carrying a 45-pound pack in under 45 minutes, Riley was assigned to the third AmeriCorps wildland fire team hosted at Great Dismal Swamp this year.

That team, appropriately named "**Phoenix 3**" helped snuff out a wildfire in North Carolina. Then the Lateral West Fire started and Phoenix 3 was among the first responders. They worked with firefighter Jordan Black from nearby Mackay Island National Wildlife Refuge. Black, an alumnus of the AmeriCorps program, was amazed by the team's enthusiasm. "We were in the thickest smoke I've ever been in my life and they thought it was the coolest thing in the world. "We're in the middle of the fire!" they said."

"AmeriCorps is a great opportunity to expose young adults to wildland fire and the role fire plays to restore ecosystems," said Steve Hubner, who oversees the refuge's AmeriCorps program at the refuge. Hubner, a Forester in the U.S. Fish and Wildlife Service's Northeast Regional Fire Program, likes the real world experience of Phoenix 3 at the Lateral West Fire. "They're not treated with kid gloves. They are firefighters just like anybody else out there."

Hubner's hope is that some Phoenix 3 members will, like Jordan Black, decide to make firefighting a career and come back to work for the U.S. Fish and Wildlife Service. In the meantime, he's enjoying seeing the young people he instructed in the classroom put their skills to work. "It's nice to see the complete cycle," he said.

AmeriCorps National Civilian Community Corps is a 10-month, team-based residential program for people age 18-24. The mission is to strengthen communities and develop leaders through direct, team-based national and community service.

Biomass News

Biomass Producer to Open Wood Pellet Plant in North Carolina

WRAL.com (August 4) - A company that makes [biomass fuel](#) for energy production announced that it would open a wood pellet manufacturing plant in Northampton County.

The \$60 million Enviva LP plant in Garysburg will have the ability to make 400,000 metric tons of pellets, officials said. The company plans to buy all of its raw materials locally, which could create more jobs in the logging and forestry supply chain.

Role of Biomass Grows, Experts Say

AgWeek.com (August 4) - The people who know most about biomass don't think it will replace fossil fuels or other energy sources. But the experts all agree that [biomass has a role to play](#)

Billion-Ton Biomass Update Report

BioEnergyKDF.net - The report, *Biomass as Feedstock for a Bioenergy and Bioproducts Industry: The Technical Feasibility of a Billion-Ton Annual Supply* (generally referred to as the Billion-Ton Study or 2005 BTS), was an estimate of "potential" biomass available within the contiguous United States based on assumptions about current and future inventory production capacity, availability, and technology. This follow-up report, *U.S. Billion-Ton Update: Biomass Supply for a Bioenergy and Bioproducts Industry* (generally referred to as the 2011 BT2), expands on the 2005 BTS to include information on:

A spatial, county-by-county inventory of potentially available primary feedstocks
Price and available quantities (e.g., supply curves) for the individual feedstocks
A more rigorous treatment and modeling of resource sustainability

To view both of these reports, visit the [Bioenergy KDF](https://bioenergykdf.net/content/billiontonupdate) website. <https://bioenergykdf.net/content/billiontonupdate>

ATFS Announces four Regional Outstanding Tree Farmers of the Year

Washington, D.C. - The [American Tree Farm System](#) (ATFS) has named Putnam "Put" Blodgett (Lyme, New Hampshire); Russ and Barbara Ford (Columbia, Mississippi); Joseph "Steve" and Janet Funk (Coeur d'Alene, Idaho); and Walt and Donna Lange (Swanton, Ohio) as [2011 Regional Tree Farmers of the Year](#) sponsored by [Stihl, Inc.](#)

This annual award recognizes outstanding sustainable forest management on family-owned woodlands. Every year, the four regional winners are recognized for stewardship of America's family woodlands. Stemming the loss of America's woodlands is vital to our country's clean water and air, wildlife habitat, recreational activities, and producing the wood and paper products we all need.

ATFS provides landowners with the validation that they are doing right by their land, meeting the highest standards of sustainability and being good stewards for the future.

One of the four regionals will be announced as the National Outstanding Tree Farmer of the year during the 2011 National Tree Farmer Convention on August 11 in Albuquerque, New Mexico.

[Putnam "Put" Blodgett](#) has been a Tree Farmer for more than 50 years, managing 670 acres of woodlands near Lyme, New Hampshire. He has always lived off the woodlands of his Tree Farm - initially, when it was under the ownership of his parents, followed by his ownership of the land, and eventually through the founding and directing of a boys' summer camp within its woodlands.

Through intensive management, Blodgett has derived the majority of his income from the farm and through his forest management activities. More than 90 percent of the white pine, hemlock, and red oak that went into the building of his retirement home was harvested from the Tree Farm. The heating and hot water needs of the home are supplied by the Tree Farm's forest resources. In addition to managing the Tree Farm to meet his personal living needs, Blodgett has incorporated numerous and successful management practices to improve wildlife, water, and recreation on the Tree Farm.

[Russ and Barbara Ford](#) started the first local forestry organization in Mississippi, with Russ holding an active office in the organization for a number of years. Sharing information about invasive species control, practicing active wildlife management for both game and threatened species, and making a commitment to improving water quality has earned the couple a bookmark in the history of forestry in the State of Mississippi.

Russ has made tree farming his only job, but he has not done so at the expense of the resources of the farm. Firebreaks, road construction and maintenance, pre-commercial thinning, pruning, mowing, prescribed burning, tree planting, herbicide applications and more are on schedule and performed nearly 100 percent of the time by Russ himself. And the 'special ones' are not forgotten: numerous gopher tortoises are located on the Tree Farm and Russ actively manages for them, striving not to destroy their habitat.

[Steve and Janet Funk](#) began with a dream to live near the woods and streams of the West, where they might find opportunity to camp occasionally. Opportunities for jobs near Coeur d'Alene, Idaho and for purchase of a derelict farm in a small mountain valley with a stream running through the property put the dream into their lap - and into reality.

Since the early 1970s and with the purchase of the property, the dynamo duo has been advocates for responsible management, forest restoration, and environmental education. Logging with a team of Belgian mares, comprehensive and amended forest management plans, and educating themselves through University of Idaho Extension opportunities have given Steve and Janet the foundation from which to speak on projects and issues that may affect the viability of the waters and woods of their mountain valley Tree Farm.

[Walt and Donna Lange](#) , self-taught landowners, own and manage a Tree Farm near Swanton, Ohio. They have been honored for their exemplary woodland management practices, including planting thousands of trees and conducting numerous beneficial resource projects such as the "Green Tree Marsh." This project was created to provide a valuable seasonal water source for wildlife.

The professional forestry community holds Walt and Donna in particularly high esteem for their efforts to spread the word about trees to innumerable groups of people for years, especially Boy Scouts and 4-H groups. Local Scout groups have made the Lange Tree Farm their annual location for "camping within the pines." Walt and Donna, their two daughters, and five grandchildren are all an integral part of the field and management crews of the Tree Farm in preparing the family property for the next generation.

"Every year, we at the American Tree Farm System commit ourselves to the recognition of family forest owners like Putnam, the Fords, Funks, and Langes who contribute to our country's natural resources, communities, and good paying jobs without expectation of recognition," stated Liz Sandler, ATFS Director.

The American Tree Farm System® (ATFS), a program of the American Forest Foundation, is a network of private woodland owners sustainably managing 26 million acres of forestland. It is the largest and oldest sustainable family woodland system in America, internationally recognized, meeting strict third-party certification standards. For 70 years, ATFS has enhanced the quality of America's woodlands by giving forest owners the tools they need to keep their forests healthy and productive.

STIHL Inc. is the exclusive presenting sponsor of the ATFS Outstanding Tree Farmer of the Year Regional and National Awards, as well as the sole, handheld outdoor power equipment provider for the ATFS. STIHL Inc. manufactures the world's largest selling brand of chain saws and produces a full line of powerful, lightweight, and versatile handheld outdoor power equipment for homeowners and professional users. STIHL products are sold through servicing power equipment retailers from coast to coast- not mass merchants. STIHL products sold through U.S. STIHL dealers are for distribution in the United States only. For more information or for the name of the closest STIHL retailer call toll free 1-800-GO STIHL (1-800-467-8445) or visit the STIHL Web site at www.stihlusa.com

New Curriculum Explores Profound Changes Facing America's Forests Today

***2011 International Year of Forests Provides Incentive for Teachers and Students
to Investigate Environmental Issues Focusing on Forests***



Washington, D.C. - When teachers head back to school, their students can learn first-hand about forests, thanks to a new teaching resource from Project Learning Tree®, the environmental education program of the American Forest Foundation.

"Do you know the water from your faucet might be naturally filtered by a forest instead of a water treatment plant? Do you know you can calculate the carbon sequestered by the trees in your own backyard? Do you know that one of the biggest threats to America's forests is the transfer of family property between generations?" asks Tom Martin, President and CEO of the American Forest Foundation. "These are just a few examples of the types of thought-provoking questions that high school teachers can pose to students using a new Project Learning Tree curriculum guide that engages students in exploring forests in their own communities," says Martin.

The United Nations General Assembly designated 2011 as International Year of Forests to promote broader understanding of the importance of forests, and to bolster global efforts to promote sustainable forest management and conservation.

PLT's new high school curriculum *Exploring Environmental Issues: Focus on Forests* teaches students about forest health, fresh water supply, climate change, who owns America's forests, and more. Hands-on classroom lessons and field investigations help students develop an understanding and appreciation for stewardship and informed decision-making on issues that affect forests.

For example, in the "Forest to Faucet" activity students evaluate the extent to which their own community's water supply is affected by forests and forest management. In "Climate Change and Forests," students use a carbon footprint calculator to analyze their personal effect on carbon dioxide levels in the atmosphere, calculate the amount of carbon stored in a single tree, and explore how carbon sequestration can affect carbon dioxide levels. Another activity "Who Owns America's Forests?" examines the critical issue of changing forestland use and ownership. Through local interviews, students capture relevant data for their region, and offer possible solutions to help conserve forestland in their community.

High school educators and junior college professors can obtain a copy of *Exploring Environmental Issues: Focus on*

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Forests by attending *a PLT professional development workshop* in their area. AFF's 50-state PLT network trains more than 30,000 PreK-12 educators every year through 1,500 workshops held across the country. State PLT programs also help nurture relationships between classroom teachers and local foresters, woodland owners, and other natural resource professionals.

"These relationships make valuable on-the-ground connections for students and their teachers, and can help grow the next generation of conservation leaders," said Martin.

"This curriculum allows students to participate in activities that teach them the job skills of foresters and other natural resource professionals," said Kathy Roberts, 10-12th Grade Environmental Science Teacher at Lakeside High School in Hot Springs, Arkansas, and one of 38 teachers who field-tested the activities with students. "I like to provide my students with career information that covers the entire spectrum, and they loved the hands-on outdoor learning!"

Since 1976, PLT has provided environmental education training and academic curricula for teachers and other educators working with youth from preschool through grade 12, and college students. To ensure that PLT meets the needs of educators, hundreds of professional educators and technical experts help develop, review, field test, and independently evaluate all of PLT's curriculum materials. The process includes research, surveys, writing workshops, and reviews with educators and resource professionals; revisions based on pilot testing and field testing; and formal assessment of impact on student learning by independent evaluators.

"PLT helps teachers incorporate a hands-on approach to learning core subject matter and basic skills by exploring complex environmental issues," said Kathy McGlaufflin, Senior Vice President of Education at the American Forest Foundation. "*Focus on Forests* integrates teaching about forests into a multitude of subject areas and develops students' critical-thinking, problem-solving, and decision-making skills. It uses the outdoors for learning and connects classroom studies to the real world to make the learning relevant and fun for students."

"These [*Focus on Forests*] activities make students aware that trees have a value that isn't simply based on their market price as timber or other forest products," said Michael Dalton, 9-12th Grade Science Teacher at Berkshire School in Sheffield, Massachusetts. "With the help of this guide, my students developed a forest management plan for our school, using a variety of tools to consider the complete value of trees, not just for our local environment, but more globally as well."

Support for the development of *Exploring Environmental Issues: Focus on Forests* was provided by the USDA Forest Service and Idaho Forest Products Group.

A high-quality product shot of the curriculum is available at: www.forestfoundation.org/Focusonforestscover.

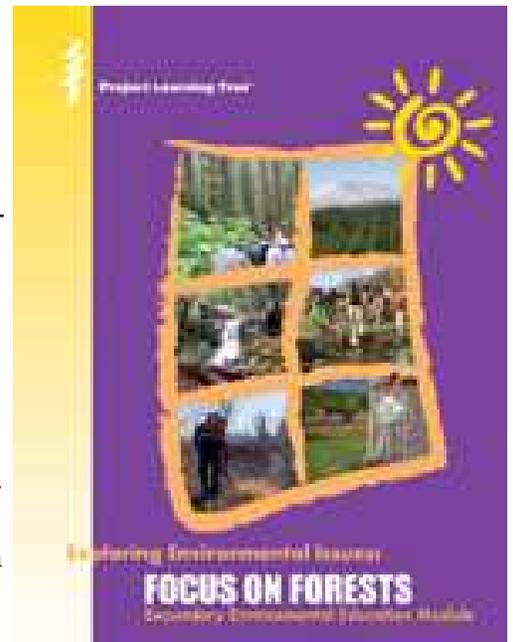
The **American Forest Foundation** (AFF) works on-the-ground with families, teachers, and elected officials to promote stewardship and protect our nation's forest heritage. A commitment to the next generation unites our nationwide network of forest owners and teachers working to keep our forests healthy and our children well-prepared for the future they will inherit.

To grow the next generation of leaders ready to inherit America's natural legacy, AFF works with tens of thousands of teachers each year through its **Project Learning Tree**® program, giving them peer-reviewed, award-winning environmental education curricula. In an era where more and more children are disconnected from nature, over 500,000 teachers nationwide have been trained in this curricula, reaching 75 million students.

Income of North Carolina Timber Harvested and Delivered to Mills

Posted on [July 12, 2011](#) by [jajeuck](#)

Interested in how much forestry contributes to your county's economy? Interested in where your county stands in relation to other NC counties? The annual report for 2010 is available at this link: [2010 Income of North Carolina Timber Harvested and Delivered to Mills](#)



Strnad Receives Governor's Conservation Achievement Award

by Tilla Fearn

Each year the [North Carolina Wildlife Federation](#) (NCWF) presents the prestigious **Governor's Conservation Achievement Awards**. The awards honor individuals, governmental bodies, organizations, and others who have exhibited an unwavering commitment to conservation in North Carolina. These are the highest natural resource honors given in the state.

Renee Strnad - 2011 Environmental Educator of the Year - NC

We are very excited that **Renee Strnad**, Extension Forestry Specialist and Coordinator of NC Project Learning Tree ® (NCPLT) in the College of Natural Resources at NC State University was selected as **Environmental Educator of the Year**.

One of the goals of the NCWF Conservation Awards is to inspire all North Carolinians to take a more active role in protecting the natural resources of our state through the celebration of these individuals and organizations.

Strnad's enthusiasm for her work with NC State Extension Forestry, NCPLT, the Fur, Fish & Game Rendezvous 4-H Camp and with organizations like the North American Association of Environmental Educators and Environmental Educators of North Carolina have given her ample opportunities to educate and inspire people of all ages to understand and embrace the natural world around them. We are excited and proud that she is being recognized.

Congratulations, Renee!

We are also proud to have long, rewarding relationships with several other honorees including but not limited to -

Lewis Ledford - CONSERVATIONIST of the Year

The longtime director of the North Carolina State Parks system, Ledford is a friend of the college and the 2009-2010 Lifetime Achievement Award winner from our Department of Parks, Recreation & Tourism Management

Wilburn (Wib) Owen - FOREST CONSERVATIONIST of the Year

An alumnus of our forestry ('78) and recreation ('84) programs, Owen has served at the Wildlife Resources Commission and as State Forester for North Carolina where he had responsibility to protect our forests for the people of our state. Owen and his staff were (and still are) frequent partners and collaborators with researchers and extension specialists at NC State.

Hal Atkinson - SPORTSMAN of the Year

A 1966 alumnus, Atkinson served for 20 years as chief of the N.C. Wildlife Resources Commission's Division of Wildlife Management where he had daily impact on conservation in the state and where he championed collaboration with NC State's wildlife researchers and extension specialists.

We congratulate each awardee and thank them for their dedication to conservation in North Carolina and for their past and future support of the NC State College of Natural Resources.



Survey of Family Woodland Owners in the Southern United States

Posted on [August 4, 2011](#) by [jajeuck](#)

The World Resources Institute's Southern Forests for the Future Project is asking for woodland owners to participate in an online survey. The data will be used to determine landowner perspectives on woodland values and issues. There is no obligation and the information is strictly confidential. The data will only be used in summary format rather than individual answers.

If you are woodland owner interested helping provide information useful to this project – please go to their survey website: <http://southernforestsurvey1.org/r/survey.html>.

To learn more about the World Resources Institute, please see their website at: <http://www.wri.org>

Agricultural Development and Farmland Preservation Trust Fund

2011 grant recipients

RALEIGH – The [Agricultural Development and Farmland Preservation Trust Fund](#) recently awarded more than \$1.8 million to help communities across the state protect farmland and promote agricultural enterprises, Agriculture Commissioner Steve Troxler announced today.

“The trust fund was able to assist 19 projects with funding this year,” Troxler said. “Although there’s a lot more work to be done, I am pleased with the progress counties and conservation groups are making to protect our valuable agricultural resources.”

Below is a list, by county, of applicants that received grants:

Alamance - Alamance County received a grant of \$100,000 toward the purchase of a perpetual conservation easement on 36 acres of Jeff D. Wilkins’ crop and livestock farm.

Anson - The Land Trust for Central North Carolina was awarded \$154,630 toward the purchase of a perpetual conservation easement on 131 acres of farm and forest land owned by John Bishop of Kannapolis. The land is located in Anson County.

Buncombe - The Southern Appalachian Highland Conservancy received \$31,609 to assist with the purchase of a perpetual conservation easement on a 10-acre produce farm owned by Annie Louise Perkinson of Fairview.

Cabarrus - Cabarrus County Soil and Water Conservation District received \$175,000 to assist with the purchase of a 50-year conservation easement on 54 acres of a livestock and poultry farm owned by Thomas E. Porter Jr. of Concord.

Caswell - Piedmont Conservation Council received \$15,000 to assist with the development and adoption of a farmland protection plan for Caswell County.

Catawba - Catawba County Planning, Parks and Development Department was awarded \$15,000 to help with the development and adoption of a county farmland protection plan.

Chatham - Triangle Land Conservancy received \$192,000 toward the purchase of a perpetual conservation easement on 98 acres of a crop and dairy farm owned by Janice Lindley and Patricia Ann Campbell of Snow Camp.

Chowan - Chowan Soil and Water Conservation District received a grant of \$4,000 to help pay for educational meetings and other outreach to landowners on behalf of the county’s Voluntary Agricultural District.

Duplin - Duplin County Soil and Water Conservation District was awarded \$150,000 toward the purchase of a perpetual conservation easement on 172 acres of farm and forest land owned by Francis Parks of Calypso.

Durham - Durham County received \$139,500 toward the purchase of a perpetual conservation easement on a 96-acre dairy and goat farm owned by David Krabbe and Kathryn Spann of Durham.

Haywood - Southwestern N.C. Resource Conservation and Development Council Inc. received \$73,138 toward the purchase of a 30-year conservation easement on 36 acres of a beef cattle farm owned by George L. Smathers of Canton.

Lincoln - Lincoln County Soil and Water Conservation District was awarded \$15,000 to aid the development and adoption of a county farmland protection plan.

Perquimans - Perquimans County Cooperative Extension received \$4,000 to help pay for educational meetings and other outreach to landowners on behalf of the county’s Voluntary Agricultural District.

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Richmond - Richmond County Cooperative Extension was awarded \$4,000 to help pay for educational meetings and other outreach to landowners on behalf of the county's Voluntary Agricultural District.

Swain - Swain County Soil and Water Conservation District received \$15,000 to help with the development and adoption of a county farmland protection plan.

Union - Catawba Lands Conservancy received \$286,446 toward the purchase of a perpetual conservation easement on the 114-acre Howey Family Farms of Monroe.

The trust fund also awarded grants to the following organizations for projects of regional impact:

Duplin County - Duplin County and Duplin County Cooperative Extension received \$86,000 to help purchase livestock handling equipment for the proposed southeastern regional area livestock handling and marketing facility. The facility will serve **Brunswick, Duplin, Jones, Pender, Sampson and Wayne counties**

The N.C. Foundation for Soil and Water Conservation received a grant of \$300,000 to assist with creating a 30-year landowner agreement program for the preservation of working farms and forests under the military training route in the following eastern N.C. counties: **Beaufort, Bertie, Duplin, Edgecombe, Franklin, Halifax, Harnett, Johnston, Jones, Lenoir, Martin, Nash, Onslow, Pamlico, Sampson and Wake.**

North Carolina's Eastern Region received \$45,000 to help with the development and adoption of farmland protection plans for **Carteret, Craven and Pamlico** counties.

The trust fund's purpose is to support projects that encourage the preservation of qualifying agricultural, horticultural and forest lands while fostering the growth, development and sustainability of family farms. Grants can be awarded for agricultural agreements that promote the active production of food and fiber on farm and forest lands; public and private enterprise programs that promote profitable and sustainable farm and forest lands; and the purchase of conservation easements on farm and forest lands.