



# North Carolina Forest Stewardship

## News

## Summer 2014

### Excellence in Action Award Presented for Cogongrass Early Detection and Rapid Response

Jeremy Callicut and Tom White spotted a patch of cogongrass in Stanly County and acted quickly, earning them the Excellence in Action Award from the N.C. Invasive Plant Council.

Both men, employees of the North Carolina Forest Service were honored at the N.C. Invasive Plant



Council's Annual Meeting for their keen eyes and quick reactions to control what many experts consider to be one of the world's worst weed species.

While assisting a landowner in Stanly County, Forester Tom White and Assistant County Ranger Jeremy Callicut, spotted a small patch of the **invasive cogongrass**. The two saw the small, immature patch and instantly suspected cogongrass even though they had only seen pictures of it in "Pest Alerts" and trainings. They contacted Rick Iverson, a noxious weed specialist in the N.C. Department of Agriculture & Consumer Service's Plant Industry Division, who confirmed their diagnosis of the weed plant. White and Callicut then assisted Iverson with surveying the area to see if the plant had spread to nearby fields, sprayed the

*(Continued on page 3)*

# The Stewardship Coordinator's Corner

It's hard to believe 2014 is half over. Even though we are still having some hot and humid days I'm sure we all look forward to fall in North Carolina with the changing leaf colors, [North Carolina State Fair](#), [Mountain State Fair](#) and the cooler temperatures associated with fall weather.

It has been a busy year! We have some interesting articles in this issue. Forest Stewardship landowners Dwight and Judy Batts made forestry in North Carolina proud when they were elected the National Tree Farmers of the year. Hurricane season is still here and there is [forest storm recovery information](#) if you need it. Invasive species continue to challenge forest management recommendations.

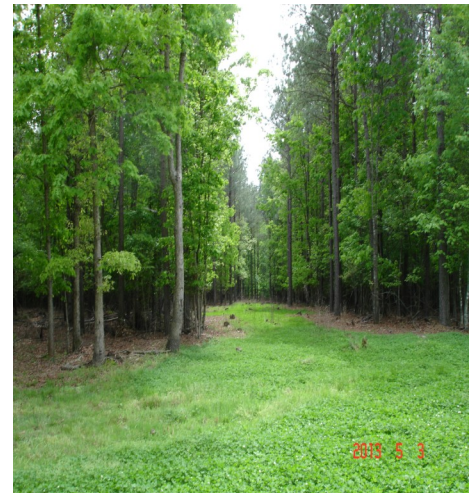
The Forest Stewardship Program is also proud to introduce and welcome Forest Stewardship Biologist, [Stephen Thomas](#) in the Mountain region. Stephen works with the North Carolina Wildlife Resource Commission (NCWRC) and is available to help through our cooperative agreement with NCWRC. Several of our updates in this issue are about wildlife in North Carolina and some of the concerns and opportunities to manage them.

For more information about the North Carolina Forest Stewardship Program, or to be added to our email list, contact your [county forest ranger](#) or Stewardship Coordinator [Les Hunter](#) or simply fill in our online [Stewardship Request Form](#).

Yours in Stewardship,

Les Hunter

N.C. Forest Stewardship Coordinator



Cover—Excellence in Action Award

Pg. 3—2014 National Outstanding Tree Farmers of the Year

Pg. 5—WRC Stewardship Biologist for the Mountain Region

Pg. 6—Local Land Trust Partnership Protects Forests & Water

Pg. 8—In Memory of Leo Donald Brevard

Pg. 9—8,000-acre conservation project in Transylvania County

Pg. 11—Online Forest Health Maps Released

Pg. 12—Timberland Investments and the Value of Dirt

Pg. 13—Anglers Can Help Prevent the Spread of Invasive

Pg. 14—Wildlife Commission Reports CWD Not Detected in NC

Pg. 15—Honeybees and Agriculture

Pg. 16—Web Soil Survey Update Improves Customer Service

Pg. 17—Board of Agriculture approves fees for woodland plans



## PEOPLE

*(Continued from page 1)*

patch with appropriate herbicides, and eventually burned the dead leaves of the plants. While the patch is thought to be under control, the area is still being monitored.

Although nobody knows for certain how this small clump was started, cogongrass can easily establish if seeds or rhizomes are transported as contaminants on equipment or on commodities such as hay, which may have moved from areas in other states where cogongrass is established. This is only the second time this plant has been spotted in the state. The other patch was documented and controlled in May 2012, in Pender County.

The public is encouraged to learn more about cogongrass and how to identify it ([www.cogongrass.org](http://www.cogongrass.org)) and to report suspected infestations to the NCDA&CS at 1-800-206-WEED or email information to [newpest@ncagr.gov](mailto:newpest@ncagr.gov).

## 2014 National Outstanding Tree Farmers of the Year

*Story courtesy of the American Tree Farm System®*

*Award Sponsored by STIHL, Inc.*

WASHINGTON, D.C. — Judy and Dwight Batts of Wilson County, North Carolina, have been named 2014 National Outstanding Tree Farmers of the Year by the [American Tree Farm System®](http://www.americantreefarm.com) (ATFS), a program of the [American Forest Foundation](http://www.americanforestfoundation.org) (AFF). The couple are the fifth generation to manage their family-owned Tree Farm, Batts Tree Farm. They received their award at the ATFS Tree Farmer Convention in Pittsburgh, Pa., on Friday, July 18. The Outstanding Tree Farmer of the Year award is sponsored by [STIHL, Inc.](http://www.stihl.com) AFF President and CEO Tom Martin joined Kenneth Stewart Jr., Chair of AFF's Board of Trustees and Brad Sorgen of STIHL in presenting the Batts's with a trophy and \$1,000 in STIHL product certificates.

The Batts family, which includes their children and grandchildren, manage their 375 ATFS-certified acres of woodland for timber (mostly loblolly and longleaf pine), water quality, wildlife habitat and recreation. Through perseverance and hard work they have established 60 acres of longleaf pines, a native species that once covered much of the southeast U.S. but which has declined dramatically over the past century.

The couple raises and releases quail on their property and maintains nest boxes for mallard, pintail and wood ducks. The nest boxes they provide for bluebirds produce between 200 and 250 chicks every year. More than seven acres of wildflowers, grasses and clovers support bees and other pollinating insects. Educating others about forest



**North Carolina Forest Stewardship Landowners Judy & Dwight Batts Named ATFS National Outstanding Tree Farmers of the Year.**

*(Continued on page 4)*

(Continued from page 3)



stewardship is important too. Since 2001, Dwight and Judy have hosted more than 1,500 visitors on their farm, including other Tree Farmers from across the U.S., scouts, school groups, forestry students and professionals, and delegates from Mexico and China.

“Dwight and Judy Batts not only represent the highest standards of forest stewardship, but also the ideal of keeping forests as forest, to be managed sustainably for future generations,” said AFF President Martin. “They are the fifth generation to steward their land, and they have made sure their work will continue. They have demonstrated their leadership among America’s family forest owners by making their Batts Tree Farm a model of forest management, a place for conservation of water and wildlife, and a place where children and adults alike can learn about and enjoy the outdoors.”

“The sustainable production and conservation that Dwight and Judy have created on their family homestead is an inspiration to natural resource professionals, other landowners,

visiting school children and anyone else who is lucky enough to pay a visit,” said Sean Brogan of the North Carolina Forest Service. The couple, he says, “embodies the spirit of the Tree Farm Program.”

Every year, ATFS inspecting foresters and state committees nominate Certified Tree Farmers whose conservation efforts, outreach efforts to their community and advocacy for sustainable forest management exceed expectations.

“Privately owned woodlands are vital to our country's clean water and air, wildlife habitat, recreational activities and producing the jobs, wood and paper products we all need. These benefits wouldn't be possible without the outstanding stewardship and hard work of dedicated landowners across the country, and the American Tree Farm System is proud to recognize our outstanding Tree Farmers every year,” said Rita Hite, Executive Vice President for Woodlands and Policy with the American Forest Foundation.

In addition to National Outstanding Tree Farmers of the Year Judy and Dwight Batts, regional honorees celebrated on July 18 includes: *Northeast Region* - Bambi Jones and David (“Tracy”) Moskovitz, Whitefield, ME; *North Central Region* - Kim and Dennis Schoeneck, Pelican Lake, WI; and *Western Region* – Audrey and Rick Barnes, Roseburg, OR.

The Regional and National Outstanding Tree Farmer of the Year awards are sponsored by [STIHL Inc.](#), manufacturer of the number-one-selling brand of handheld outdoor power equipment in America. STIHL is proud to support the accomplishments of hard-working Tree Farmers from across the country.



# WRC Stewardship Biologist for the Mountain Region

Stephen Thomas joined the N.C. Forest Stewardship Program team as the Mountain Region Forest Stewardship Biologist April 1, 2014 after Kelly Hughes Retirement from the Wildlife Resources Commission. Below are some personal notes about Stephen following an interview with FSP news.

**FSP News:** Stephen, what is your stewardship history?

**DN:** I have always tried to practice good stewardship qualities on and off the job for the benefit of the forest ecosystems and associated wildlife resources. Working as a Technician in several different states and agencies, I have promoted and been a part of improving fish/ wildlife resources in several different ecosystems. As a public employee, I have always been approached by landowners for technical help when they learn of the agency I work for. I have always tried to provide the best technical guidance on sound forest stewardship activities while incorporating the best wildlife management practices.



**FSP News:** How about your work experience?

**DN:** I have been blessed and very fortunate to have worked in four different states with three different agencies at the Federal and State level. Those agencies include: the U.S. Fish and Wildlife service (Montana and Tennessee), the Florida Fish and Wildlife Conservation Commission, and the North Carolina Wildlife Resources Commission (NCWRC). I have had a variety of different work experiences: from conducting big-horn sheep surveys in the Missouri River Breaks of Charles M. Russell National Wildlife Refuge in Montana to managing waterfowl impoundments in the southern tip of Florida near the everglades. From assisting with fighting wildfires in the prairies of Montana, to conducting prescribed burns in pine/palmetto ecosystems of Florida.

I have been a state employee of North Carolina going on four years. I have always worked for the NCWRC primarily in the Piedmont and Mountain regions as a Conservation Technician (1) at two wildlife depots (Marion and Butner-Falls of Neuse). In the Piedmont region, I primarily implemented wildlife management activities. In the mountain region, I primarily worked on Green River gamelands and the Pisgah National Forest performing several of the same wildlife management activities, as well as conducting black bear popula-

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tion monitoring efforts, maintaining wildlife fruit trees, and assisting with yearly hard mast surveys.

**FSP News:** Where did you go to school?

**DN:** I went to school at the University of Tennessee in Knoxville, Tennessee. I graduated with a *B.S.* in Wildlife and Fisheries Science with an emphasis in wildlife management and *minor* in Forestry in 2008.

**FSP News:** Anything else the folks might want to know about you?

**DN:** I am excited to start my new position as the mountain Technical Assistance Biologist and look forward to working with all the great private landowners and cooperative agencies in the western part of the state! I am an avid hunter, sportsman and conservationist. There is nothing better than cooling off on a hot summer day fishing near a cool mountain stream. I grew up playing sports and am a die-hard Tennessee Volunteers fan! GO VOLS!

**FSP News:** Thanks Stephen. How can folks contact you?

**DN:** I can be contacted with questions or comments at:

Stephen Thomas

*Technical Assistance Biologist—Mountain Region*

North Carolina Wildlife Resources Commission

Cell: (828)-803-5280

[Stephen.thomas@ncwildlife.org](mailto:Stephen.thomas@ncwildlife.org)



Whitetail Deer in Velvet—USFW Files

## LOCAL LAND TRUST PARTNERSHIP PROTECTS FORESTS and DRINKING WATER

*The Upper Neuse Clean Water Initiative, working with landowners, foresters, and municipal governments, implements sustainable forestry practices on more than 50 properties to protect drinking water downstream.*

Raleigh, N.C. – The Upper Neuse Clean Water Initiative completed work this fall on a \$1.7 million grant from the U.S. Endowment for Forestry and Communities. The three-year grant awarded in 2010 was part of the Healthy Watersheds through Healthy Forests Initiative, which directed monies to three projects nationwide to safeguard drinking water supplies by implementing sustainable forest management upstream from reservoirs.

The grant enabled the partnership of seven local land trusts, coordinated by the Conservation Trust for North Carolina, to work with landowners and foresters within the 770-square mile Upper Neuse River basin to identify and implement forest management practices that will protect drinking water for more than 600,000 people in Wake, Durham, Orange, and Granville counties.

(Continued on page 7)



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The land trusts worked with private forest landowners to voluntarily adopt practices that improve forest management, enhance forest health, and increase forest cover – practices that benefit the nine drinking reservoirs in the Upper Neuse basin while helping landowners grow economically viable and sustainably managed timber. The partners helped create 38 Forest Stewardship Plans covering 5,412 acres, helped implement 26 forest management projects covering 856 acres, and completed six working forest conservation easements covering 668 acres.

A Forest Stewardship Plan is prepared by a certified forester and outlines activities and a timeline for management actions that will enhance a forest for wildlife, soil and water quality, timber production, recreational opportunities, and/or natural beauty, depending on an individual landowner’s objectives. Forest management projects are the actions taken to implement the plan, and represent sustainable forestry in practice. Working forest conservation easements restrict specific types of development on a property to protect forest values while enabling landowners to earn income from the land through sustainable forestry. All of these tools allow landowners to conserve their forest resources for long-term benefits, but still derive income to support the ongoing costs of ownership and stewardship.

The partners also purchased and donated steel bridge mats and a rehab plow to the North Carolina Forest Service. This equipment, which is available to loggers in the Upper Neuse basin at no charge, will enable foresters to manage forests and harvest timber with greatly reduced impacts to water quality.

Working with the UNC Environmental Finance Center, Upper Neuse Clean Water Initiative partners also created tools to inform local governments about financing options to fund drinking water protection. The information helped Raleigh and Durham approve minimal increases in water rates in 2011 to establish new funding sources to conserve lands along the streams that feed drinking water reservoirs.

“The generous grant from the US Endowment for Forestry and Communities enabled local land trusts to work with landowners to conserve and sustainably manage nearly 7,000 acres of forests in the Upper Neuse River basin,” said Reid Wilson, Executive Director of the Conservation Trust for North Carolina. “This common sense approach to maintaining water quality will safeguard downstream drinking water supplies like Falls Lake for decades to come.”

*The Upper Neuse Clean Water Initiative (UNCWI) is a partnership effort to prioritize and protect those lands most critical for the long-term health of drinking water supplies in the Upper Neuse River Basin in central North Carolina.*

*The land trusts involved in the Upper Neuse Clean Water Initiative include the Conservation Trust for North Carolina (coordinator), Ellerbe Creek Watershed Association, Eno River Association, Tar River Land Conservancy, Triangle Greenways Council, Triangle Land Conservancy, and the Trust for Public Land.*



Land acquisition and working forest easement site in Granville County. Picture from Conservation Trust for North Carolina

# *In Memory of* Leo Donald Brevard

December 20, 1921 - December 22, 2013

Leo Donald Brevard, beloved husband, father, grandfather, and friend, died peacefully on December 22, 2013. He was born December 20, 1921 to Hugh Brevard and Jessie Corn Brevard, the last of eight children. Mr. Brevard is survived by Eleanor Greene Brevard, his wife for 66 years; his daughters Roxanna Hoffman of Marion, N.C. and her husband Terrill A. Hoffman, and Dinah Mann of Raleigh, N.C. and her husband Stephen Mann. In addition, he is survived by three grandchildren, Amber Couch of Harrisburg, N.C. and her husband Jason Couch, Bradford Taylor of Harrisburg, N.C., and Allison Mattingly of Phoenix, Ariz. and her husband Aaronn Mattingly and her children, Charity and Conner..



After graduating from Edneyville High School, he attended Brevard College and Appalachian State Teachers College. His education was interrupted when he was commissioned as an officer in the United States Marines and served proudly with the 5th Amphibious Tractor Battalion in the Pacific Theater during WWII. First Lieutenant Brevard participated in the amphibious landings at IWO JIMA where he went on to command Company "A" during the battle.

At the conclusion of WWII, Mr. Brevard resumed his education at Appalachian State Teachers College where he earned a BS degree in Biology and History, as well as playing left guard for the Mountaineers football team. He then began his career as a biology teacher and coach. During his tenure at Valdese High School, his football and basketball teams were always competitive, especially the 1960-61 basketball team that won the Northwestern Conference regular season and tournament. His life was interrupted again by the Korean War when he was recalled to active duty. He served as an instructor at Camp Lejeune.

Mr. Brevard returned to teaching but continued to serve his country with the rank of Major in the Marine Corps Reserve. He completed his career at South Mecklenburg High School when he retired in 1983. While steadfast in his duty to his country and dedicated to his teaching career, Mr. Brevard's passion was forestry. Mr. & Mrs. Brevard began acquiring land in McDowell County in the early 1960's, and for over 45 years Mr. Brevard spent his spare time initiating forest management to improve the quality of the family forest. In addition to being a Certified Tree Farmer, and Certified Stewardship Landowner, Mr. Brevard was the recipient of the 2008 North Carolina Tree Farmer of the Year. He felt that it was his purpose to improve the property not only for timber production, but also for the improvement of wildlife, recreation, and conservation.

Memorials may be made to The Alzheimer's Association, P.O. Box 96011 Washington, DC 20090-6011 or to a charity of one's choice.



## Conservation

### 8,000-acre conservation project in Transylvania County moving ahead

A public-private partnership to conserve nearly 8,000 acres along the crest of the Blue Ridge Mountains in Transylvania County is making progress.

The N.C. Forest Service acquired more than 3,200 acres of working forestland and a significant section of the headwaters of the French Broad River's east fork in 2013, the N.C. Department of Agriculture & Consumer Sciences (NCDA&CS), The Conservation Fund and U.S. Forest Service jointly announced. The acquisition was made possible with a grant from the U.S. Forest Service's Forest Legacy Program, and state and private funding.

Located on the border of North and South Carolina, the newly protected lands will eventually become part of the prospective Headwaters State Forest. When conserved in its entirety, the future state forest will span more than nine miles and will expand opportunities for public outdoor recreation by protecting and making publicly accessible the last privately owned section of the storied Foothills Trail. It is adjacent to more than 100,000 acres of existing conservation lands in both states and provides habitat for federally endangered plant species and other federal plant and animal species of concern.



“This project may be the last opportunity to conserve a landscape-scale portion of our beloved mountains and their precious natural resources,” said Agriculture Commissioner Steve Troxler. “Acquisition will help to connect large swaths of existing conserved land and create wildlife corridors for bear, deer and various bird species.”

Ranked seventh on the 2013 national Forest Legacy Program priority list, the future Headwaters State Forest received a \$3 million grant from the Forest Legacy Program for the state's purchase of 711 acres. The federal funding was matched by \$5.4 mil-

lion in private and state funding to protect an additional 1,186 acres. Combined with the state's two additional acquisitions in 2013, a total of more than 3,200 acres of the East Fork Headwaters have been conserved.

“This Forest Legacy project is a model partnership demonstrating the importance of working together to restore and conserve working forests for future generations,” said Liz Agpaoa, U.S. Forest Service regional forester.

The N.C. Forest Service plans to create a multiuse management plan that will enable the property to be sustainably managed for timber production, while allowing for a variety of public recreational uses, including hunting and hiking.

*(Continued on page 10)*

*(Continued from page 9)*

In 2011, hunters spent \$525 million and wildlife-watching participants spent \$930 million in North Carolina. The project will also protect five miles of trout streams. Trout fishing contributed \$146 million to North Carolina's economy and supported almost 2,000 jobs, according to a study conducted on behalf of the N.C. Wildlife Resources Commission.

U.S. Sens. Richard Burr and Kay Hagan and U.S. Rep. Mark Meadows supported federal appropriations for the Forest Legacy Program and the Land and Water Conservation Fund (LWCF) in fiscal year 2013. The Conservation Fund and the state are seeking additional Forest Legacy and LWCF funds to complete the conservation of this landscape and to ensure that the land is available for public use.

Working with the N.C. Forest Service and the Carolina Mountain Land Conservancy, The Conservation Fund began the effort to conserve East Fork Headwaters in 2010. The Conservation Fund negotiated a contract to purchase the entire 8,000 acres for the state in a bargain sale from former congressman Charles Taylor and his family.

“This is a significant step forward for the East Fork Headwaters. In less than a year, more than a third of the landscape has been conserved,” said Justin Boner, The Conservation Fund's real estate director for North Carolina. “We're grateful to all of the partners for their continued commitment to this multiphase, multiyear effort that will benefit North Carolina's economy and environment for generations to come.”

The conservation project is poised to make additional acquisitions in 2014. In mid-December, the project was awarded a \$2.75 million grant from the N.C. Clean Water Management Trust Fund to purchase an additional 687 acres of forestland.





## FOREST HEALTH

# Online Forest Health Maps Released

[North Carolina Forest Service](#) Contact: [Robert Trickel](#)

A new web site containing [forest health maps](#) has been developed by the [N.C. Forest Service](#). These maps show the most up-to-date locations of invasive tree killing pests in our state. The maps are geo-referenced so they can be brought into GIS programs on desktop and mobile apps.

For those in the field, these tools are vital to help track the movement of these pests. For those in or near counties with emerald ash borer, laurel wilt or thousand cankers disease, you can keep the appropriate map file on your smartphone and if you suspect that you have found one of these pests, you can check to see if you are in a new location, and if so, report potential new infestations. New infestations can be reported to forest health personnel by phone, or by email directly from the app.

Please note that the emerald ash borer (EAB) and thousand canker disease (TCD), these are not quarantine maps. Rather, they are finer detail maps showing general areas where these pests have been detected in positive counties to date. If EAB and TCD are anywhere in a county, the whole positive county is quarantined. All maps on this page will be updated as pest activity is confirmed in new areas.

Check it out and help the Forest Service track these pests across the state. For more information, visit the N.C. Forest Service [Forest Health Invasive Pest Maps web site](#).



WRITTEN BY

[Renee Strnad](#)

Environmental Educator Forestry  
NC State University

POSTED ON AUG 12, 2014



### Meetings

#### **North Carolina Forestry Association 2014 Annual Meeting**

Grandover Resort, Greensboro, NC, October 1-3, 2014  
<http://www.ncforestry.org/events/annual-meeting/>

#### **North Carolina Tree Farm Program Annual Meeting**

October 25, 2014  
R.L. Johnson Farm in Harnett County  
For more information and registration call 919-917-8646  
[nctreefarm@gmail.com](mailto:nctreefarm@gmail.com)

#### **North Carolina Woodland Owner Associations in Your Area**

<http://cnr.ncsu.edu/blogs/wou/woodland-owner-associations/>

### Webinars

#### **[Ramping up to Forest Farm Culinary Delights](#)**

**SEPTEMBER 16, 2014**

Edible forest products are becoming more popular in the culinary world. Forest landowners may have opportunities to produce edible forest products under the shade of their woodlots. Though this presentation focuses on forest farming wild onions (aka, ramps or leeks) it includes discussions of other edible forest products, as well. So, join the webinar and ramp up to forest farm culinary delights.

[Register Here!](#)

#### **Manage Your Forest for Pine Straw, Rake in the Profits**

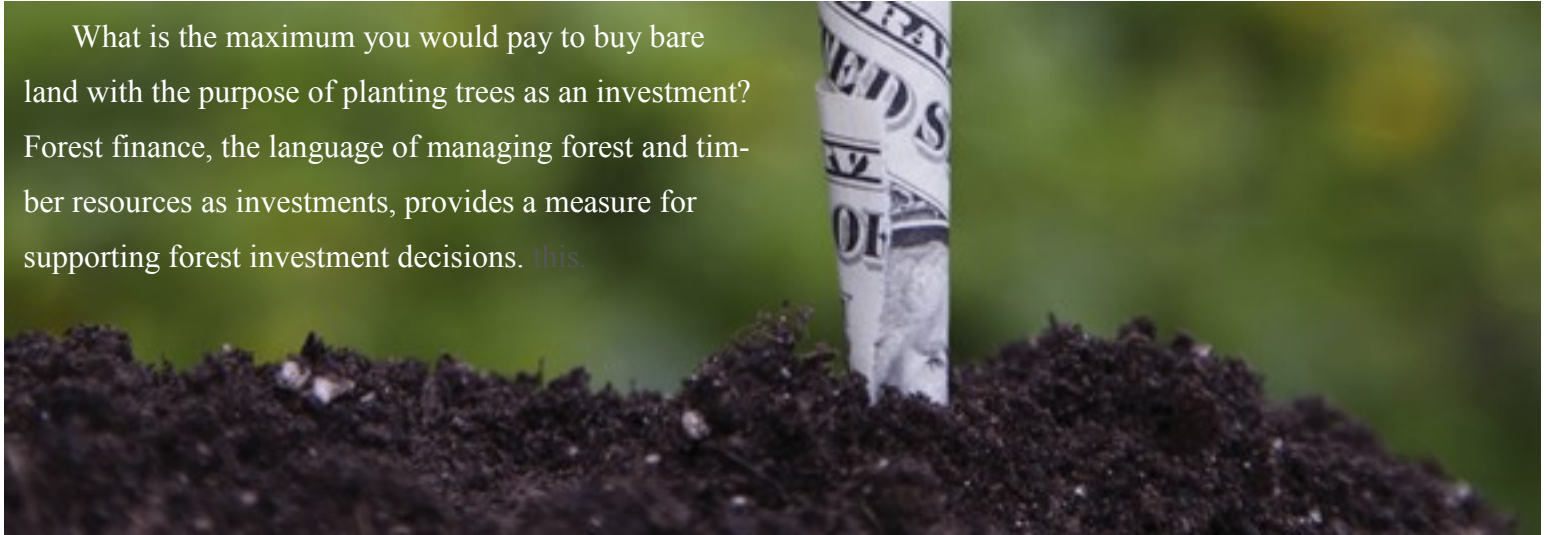
**October 9, 2014**

Tired of raking those hardwood leaves in your yard? Maybe you should consider raking pine straw from your forest instead!

[Information and Registration](#)

## Timberland Investments and the Value of Dirt

What is the maximum you would pay to buy bare land with the purpose of planting trees as an investment? Forest finance, the language of managing forest and timber resources as investments, provides a measure for supporting forest investment decisions. [this](#).



### The Value of Bare Land

In 1849, 27-year old Martin Faustmann read an article about forest valuation and shook his head in disagreement. A German forester and appraiser, he put pen-to-paper and published an alternative technique for valuing bare forestland, or “dirt,” for tax purposes. Faustmann’s approach, a special application of net present value (NPV), uses prices, costs and interest rates to determine the optimal economic forest rotation when managing land as forests in perpetuity. Faustmann’s formula – referred to as bare land value (BLV) or land expectation value (LEV) or soil expectation value (SEV) – remains a standard model for maximizing forest value.

What makes BLV useful for evaluating forestry investments? BLV allows us to compare forests of different rotation lengths. As such, BLV helps (1) identify the optimal rotation length for a forest; (2) order the management activities associated with a forest investment; and (3) determine whether or not to invest in specific silvicultural activities. In addition, BLV helps us conduct marginal analysis on short-term harvesting decisions related to price “spikes” or declines in local markets.

BLV does rely on “strong” assumptions. For example, BLV assumes that costs and revenues for all future rotations remain identical. BLV also assumes that the land will be reforested in perpetuity. In practice, investors may have alternative uses for the land in the future, in which case the forestry-centric BLV may not be appropriate.

BLV provides a “theoretically” appropriate measure for valuing bare land managed exclusively for timber production. In practice, the estimated BLV may not correspond to current market values for the land. Investors may also have different costs of capital (discount rates), which would produce different BLVs even with identical assumptions for initial costs and revenues.

In the book *Forest Finance Simplified*, I quote John Walker from his 1990 S. J. Hall Lecture in Industrial Forestry at U.C. Berkeley. Walker identified Faustmann’s work as the “first known correct application of compound interest rates in discounted cash flow analyses.” As a forestry professional, I take pride in thinking that a forester, Martin Faustmann, has a seminal place in the history of finance theory.



## WILDLIFE

### Anglers Can Help Prevent the Spread of Invasive Rusty Crayfish

**The rusty crayfish is a destructive, non-native crayfish found in the upper Catawba River. Biologists urge anglers who see one to kill it, note its location, freeze it, and contact [thomas.russ@ncwildlife.org](mailto:thomas.russ@ncwildlife.org).**

**(Photo by TR Russ)**



**MARION, N.C. (March 25, 2014)** — Fisheries biologists with the N.C. Wildlife Resources Commission are asking anglers to help stop the spread of the rusty crayfish — a destructive, non-native crayfish that has invaded the upper Catawba River in western North Carolina. The rusty crayfish, which measures about 5 inches long, is native to the Ohio River watershed but can now be found in Canada and 17 other states, including North Carolina.

Anglers can identify the rusty crayfish from other native crayfish by a rust-colored spot on its sides, just in front of the tail. They also have black bands on the tips of their claws.

Wildlife Commission biologists first discovered the rusty crayfish in 2007 in the North Fork Catawba River, just upstream of Lake James in McDowell County. Since that time, the crustacean has expanded approximately 10 miles upstream in the North Fork Catawba River and 11 miles upstream in the Catawba River, according to TR Russ, an aquatic wildlife diversity biologist with the Wildlife Commission.

Russ urges any angler who finds a rusty crayfish to kill it immediately, note its location, freeze it, and contact him at [Thomas.russ@ncwildlife.org](mailto:Thomas.russ@ncwildlife.org).

“The rusty crayfish has devastated aquatic communities and resulted in the loss of native crayfish,” Russ said. “They are an aggressive species, known to feed on fish eggs, as well as vegetation, reducing habitat for native fish and other aquatic animals.”

Rusty crayfish are often used as bait. Russ suspects that nonresident anglers who brought bait with them from out of state may have accidentally introduced them into Lake James, where the rusty crayfish moved upstream.

“So far they have only been found in the larger rivers in McDowell County and not in the smaller streams, such as Curtis, Crooked, Buck and Armstrong creeks,” Russ said. “Because it’s almost impossible to eradicate the rusty crayfish after it gets established, we are looking to anglers to help prevent or slow the spread of rusty crayfish into new waters.”

In North Carolina, it is illegal to transport, purchase, possess or sell rusty crayfish. Anglers can help prevent the spread of this crayfish and other invasive species, by never releasing unused bait into waterways.

For more information on the rusty crayfish, including color photographs, visit <http://www.ncwildlife.org/Learning/Species/Crustaceans/OrconectesPrusticus.aspx>

## Wildlife Commission Reports CWD Not Detected in North Carolina



**RALEIGH, N.C. (July 8, 2014)** — [Chronic Wasting Disease](#) (CWD), a transmissible and fatal neurological disease of deer and elk, was not detected in a recent statewide survey conducted by the N.C. Wildlife Resources Commission.

Humans are not known to contract CWD. No treatment or cure for CWD exists. Direct, animal-to-animal contact is a means of transmission, but evidence suggests that contaminated environments and equipment also present risks.

“CWD proves devastating to populations of cervids — the family of mammals that includes white-tailed deer, elk, mule deer and moose,” said Dr. Maria Palamar, wildlife veterinarian for the Commission. “The indications of this survey are welcome news.”

The diagnostic laboratory report was from a sampling of more than 3,800 free-ranging deer and elk beginning in 2013 and continuing through earlier this year. Biologists collected brain stem tissue and retropharyngeal lymph nodes from the animals.

“It was a successful and widespread effort to obtain samples,” Palamar said. “Much thanks goes to agency field staff in all divisions, certainly, but we have to especially thank all the deer hunters and processors who provided samples. We exceeded our sample goals. The survey also provided excellent CWD educational opportunities.”

CWD has been confirmed in neighboring states, with West Virginia reporting a case in 2005, followed by Virginia in 2010 and Maryland in 2011. Preventive measures are in place to reduce the risk of transmission in North Carolina, with stringent regulations governing anyone who holds captive cervids and regulations for hunters returning with hide, meat or trophies of cervids taken out of state.

For more information on CWD, go online to <http://www.ncwildlife.org/Hunting/AftertheHunt/DeerDiseases/ChronicWastingDisease/tabid/375/CSSTabID/0/Default.aspx> or call the Division of Wildlife Management at 919-707-0050.

CWD positive states are Virginia, North Dakota, Missouri, Michigan, New York, West Virginia, Utah, Illinois, Oklahoma, Minnesota, New Mexico, Wisconsin, Kansas, Maryland, Montana, Nebraska, South Dakota, Wyoming, Colorado, Texas, Iowa and Pennsylvania. Also, Canada’s Alberta and Saskatchewan provinces have reported CWD cases.



# Honeybees and Agriculture

Posted on **January 30, 2014** by **Catawba County Center**

Originally written by **Kellyn Montgomery**

Whenever I mention to people that I am an aspiring beekeeper, they almost always ask me why the honeybees are disappearing. Declining numbers of honeybees in the U.S. has made headlines in the past several years, but the reasons behind the decline have been unclear. The importance of honeybees for growing food makes understanding these insects and how to keep them healthy and abundant a top priority.

Honeybees were brought to North America by European settlers in the 1600s and were called “white man’s flies” by Native Americans. There are many native pollinators, but honeybees have been especially useful to farmers because they are easy to manage and transport. Farmers hire commercial beekeepers that move their hives to fields just as a crop flowers. Almond production in California, for example, is completely dependent on honeybee pollination and, according to the USDA, requires 1.4 million or approximately sixty percent of all managed honeybee hives. The value of crops pollinated by honeybees is approximately \$17 billion and makes up about one third of our daily diet.

There has been a steady decline in the number of honeybee hives in the U.S. for many decades. In the 1940s, there were 5 million honeybee hives. Today we have only 2.5 million. But in 2006, beekeepers started reporting unusually high losses of hives, which involved the sudden disappearance of worker bees and total hive collapse within in a few weeks. This phenomenon became known as Colony Collapse Disorder (CCD). From 2006-2011, beekeepers lost an average of 33 percent of hives every year. Since 2006, there has been extensive research done to identify the cause of CCD and develop best practices for beekeepers to manage losses. It is a complex issue though and involves many factors.

Recently, the USDA released a report that outlined the many factors contributing to CCD, including nutrition, pests, diseases, pesticides, and genetics. Large plantings of single crops and development of formerly vegetated lands have led to a lack of variety and quality in bee forages. Just like humans, a poor diet makes bees more susceptible to diseases, pests, and other stressors. Some farmers have tried to address this by planting flowering pollinator gardens alongside their crops. Pests and diseases, like *Varroa* mites and American Foulbrood, have been detrimental to honeybees and are commonly found in weak hives. Additionally, pesticides, which are used in all types of agriculture, can kill honeybees and other beneficial insects. Systemic pesticides (like imidacloprid, the most commonly used insecticide) enter all parts of a plant, including the pollen and nectar used by pollinators. Finally, bee genetics plays a role as bee breeders try to increase traits that improve resistance to pests and diseases.



Interestingly enough, the decline in honeybees has coincided with the sharp decline in number of farms in the US. One way you can support honeybees in our area is to try beekeeping at home. For more information, contact Catawba County Cooperative Extension at 828-465-8240.

# Web Soil Survey Update Improves Data Delivery, Customer Service

Posted by [Brad Fisher, Natural Resources Conservation Service](#)

Data on soils on the nation's 3,265 soil survey areas are now updated and available free online from USDA's [Natural Resources Conservation Service](#) (NRCS).

“This update is a major step-forward in meeting the growing demand for NRCS soils data,” said Dave Hoover, NRCS national leader of [Soil Business Systems](#). “Our soil scientists in every state helped us upgrade all our software and databases, improve our spatial data, and put together a complete suite of soil interpretations and other products our customers want.”

This update, the first since the Web Soil Survey went online in 2005, features:

- Soils data for the Continental U.S. that flows seamlessly, without gaps, across county lines and other political boundaries;
- A full complement of national soil survey interpretations that let users analyze interpretations nationally, regionally and in several states at one time;

The first set of soil survey [Major Land Resource Area](#) update projects; and

A subscription feature that forwards updates for specific soil survey areas directly to customers via email.

The NRCS [Web Soil Survey](#) now serves more than 180,000 users a month, attracting a large audience that includes landscape architects, community planners, real estate developers, engineers, as well as researchers in universities. Everyday, people in agriculture reference the survey, as do NRCS employees as they help customers with a host of issues and questions, and putting together conservation plans.

In a typical month, users print nearly 100,000 soil surveys and reports on soil properties and interpretations directly from the Web Soil Survey, and download more than 25,000 soil survey reports.

“Starting this year, we will refresh our soils data every October,” said Dave Smith, NRCS acting deputy chief for Soil Science and Assessment. “Our goal is to keep giving our customers even better and more up-to-date tools for assessing their soils, developing conservation plans for their farms, or whatever they need our data for.”

Web Soil Survey customers can click on the [“Contact Us” link](#) in Web Soil Survey to get assistance from the Soils Hotline, a state soil scientist or a local NRCS Office.

NRCS encourages everyone interested in soils to subscribe to [GovDelivery](#), a free service.

For assistance with Web Soil Survey or GovDelivery, please send an email to [soilshotline@lin.usda.gov](mailto:soilshotline@lin.usda.gov).

Visit the Web Soil Survey for the nation's soil information: [websoilsurvey.sc.egov.usda.gov](http://websoilsurvey.sc.egov.usda.gov)

- See more at: <http://blogs.usda.gov/2014/02/04/web-soil-survey-update-improves-data-delivery-customer-service/#sthash.XboqCUfh.dpuf>



# Board of Agriculture Approves NCFS Fees for Woodland Plans

## Fees were required by legislature in state budget

RALEIGH – The N.C. Board of Agriculture recently approved fees for woodland management plans, following a directive from the state General Assembly.

The state budget approved by the General Assembly directed the N.C. Forest Service to start charging for woodland plans, commonly referred to as forest management plans. The budget bill also allowed the Board of Agriculture to review and approve the fees.

“The North Carolina Forest Service has been helping protect, manage and promote North Carolina’s forests for nearly 100 years,” said Agriculture Commissioner Steve Troxler. “They have a lot of experience assisting woodland owners with valuable and tax-saving management advice. I believe the Board of Agriculture approved reasonable fees that will allow the N.C. Forest Service to continue delivering the professional services its customers have come to expect.”

Woodland plans will have a base fee of \$45. In addition, there will be a fee of \$3 per acre for forest management plans and forest stewardship plans, both of which are comprehensive plans. Practice plans, which are simpler plans that usually address just one management practice, will cost \$2 per acre in addition to the base fee. The NCFS offers a variety of forestry programs and services that are still free of charge.

“There are financial and environmental benefits to having a woodland plan,” said Sean Brogan, director of forest management and development for the NCFS. “Certain types of plans can qualify a landowner for participation in the state’s Forestry Present Use Valuation Program, resulting in significant property tax reductions. The tax savings realized in the first year alone are usually more than enough to cover the cost of a woodland plan.”

Woodland plan preparation fees can also be considered a deductible management expense for annual tax purposes.

Woodland plans provide detailed forestry recommendations, but they can also advise landowners on wildlife habitat, soil and water protection, recreation opportunities and aesthetics. In addition, they can help qualify landowners for forestry recognition programs, including forest certification.

Landowners interested in state or federal cost-share programs typically need an approved woodland plan. Participation in many of these programs results in a cost savings of 40 percent or more, depending on the program. Cost-share payments help to reduce the initial capital investment needed for many forestry projects, which leads to higher overall financial returns to the woodland owner.

Landowners interested in forestry advice and a woodland plan should contact their local county ranger for more details. Click on the “Contact Us” section of the NCFS website <http://ncforestservice.gov/> for county information. Landowners also can call the agency’s central office at 919-857-4801 for additional forestry assistance.



John Kessler, NCFS Yadkin County Ranger  
Assists Woodland Owners

I am a forest landowner interested in Forest Stewardship on my property. Please have a representative call me.

PLEASE REMOVE THIS PORTION AND MAIL TO: State Stewardship Coordinator, 1616 Mail Service Center, Raleigh, NC 27699-1616  
(or contact one of the cooperating agencies listed on this brochure)

**Name:** \_\_\_\_\_

**Address:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Phone:** \_\_\_\_\_

**County where property is located:** \_\_\_\_\_

**Tract Size:** \_\_\_\_\_ **% Forested** \_\_\_\_\_

Do you have a forest management plan?

|     |    |
|-----|----|
| YES | NO |
|-----|----|

Are you currently receiving technical assistance?

|     |    |                   |
|-----|----|-------------------|
| YES | NO | If yes, by whom - |
|-----|----|-------------------|

Organization \_\_\_\_\_

I am specifically interested in

- aesthetics
- recreation
- soil
- non-game species
- wildlife
- timber
- water quality
- rare plants
- other



For more information on Forest Stewardship in North Carolina fill out the attached form and send to us or contact the N.C. Forest Service Stewardship Coordinator Les Hunter at (919) 857-4833 or via email at [les.hunter@ncagr.gov](mailto:les.hunter@ncagr.gov).