



North Carolina Forest Stewardship

News

Fall
2014

N.C. Forest Service's Greg Cox receives 2014 Governor's Award for Excellence

Greg Cox, mechanic supervisor with the N.C. Forest Service, was recently awarded a Governor's Awards for Excellence in Efficiency and Innovation at a ceremony at the N.C. Museum of History. He was nominated for devising a program to save money on the Forest Service's equipment repairs and maintenance. The Governor's Awards for Excellence are the highest honor a state employee can receive. Greg was nominated at the state level after he was selected as Employee of the Year at the department level.

"Greg demonstrates a can-do attitude and a spirit of innovation that is admirable, and I'm thrilled to have his work acknowledged by the governor," said N.C. Agriculture Commissioner Steve Troxler. "It's great to have others recognize something I've known for many years – that our department has the best employees in state government."

Cox is responsible for the maintenance and repair of more than 100 pieces of rolling stock across an eight-county district. This equipment ranges from pick-up trucks with slip-on firefighting units to heavy equipment such as bulldozers, forklifts and motor graders. These units must be kept in a state of readiness in order to fulfill the legislative mandate that the N.C. Forest Service protect residents of North Carolina from destructive wild-fire. Greg also has direct supervision of three employees, a mechanic, forest fire equipment operator and smoke chaser.

"Greg demonstrates a dedicated work ethic, can-do attitude, and a spirit of innova-



Cox Accepting Governor's Award from N.C. Agriculture Commissioner Steve Troxler; N.C. Forest Service Assistant Commissioner Scott Bissette; Neil Alexander, director of the Office of State Human Resources.

The Stewardship Coordinator's Corner

We are almost through my favorite season—FALL! The North Carolina Mountains had several inches of snow mixed with the fall colors. Those of us in the lower elevations are still enjoying the fall colors and cooler air.

In this issue we have some timely seasonal articles pertaining to silvicultural practices and wildlife. Hurricane season ended November 30, but we are still dealing with some nor'easters on the coast. [Forest storm recovery information](#) is available if you need it. Invasive species continue to make the news with an update on Emerald Ash Borers (EAB).



As usual we try to have a variety of informational articles for a diverse audience. Please don't hesitate to call or send me information and news on woodland owners and forest related activities in your area.

I wish for everyone to have a happy and healthy Holiday Season. See you in 2015!

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

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Cover—NCFS's Greg Cox Receives Governor's Award

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PEOPLE

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tion on the job,” said Don Watson, district forester out of the N.C. Forest Service’s Rockingham office. “Many of Greg’s ideas or innovations have saved the State of North Carolina tens of thousands of dollars. Greg is an expert in metal fabrication and can often times make the parts that most others are required to purchase.”

According to Watson, Cox has improvised and or invented many pieces of equipment for the district, including rebuilding about 20 heavy duty hitches that have broken. At a cost of more \$600 per hitch, the savings add up quickly. The hitches are used on bulldozers to pull large, heavy, fire plows and are about 2 inches around and 6 inches long.

Cox’s skill is not limited to repairing hitches. In fact, he developed and built two new fire plows that allow for more accurate control of the fire plow depth. This allows the plows to be used in lighter, sandier soils, while still having the capability to operate in the parts of the state where a heavier, deeper fire line is required to get through the thick root mats in the organic soils.

Since this type of fabrication work requires specialized tools, in addition to specialized skills, Cox acquired two pieces of large equipment from the a community college that no longer needed them. The fabrication equipment was valued at between \$10,000 and \$15,000.

Cox also fabricated shrouds for some of the older shop tools that satisfies the safety requirements of the Occupational Safety and Health Administration, which saved the Forest Service thousands of dollars that would have been required to update their shop tools.

In addition to his fabrication skills, Cox has made other money-saving recommendations. This includes researching and recommending that the district invest in a transmission flusher to help maintain the districts’ initial attack vehicles. Current maintenance standards require the transmissions to be serviced every 30,000 miles, which usually takes place every other year at a cost of \$165, which equates to a savings of over \$3,000 a year.

Cox’s dedication extends outside of the garage as well. As one of only two mechanics in the district on call every day, he is often called on after hours for repairs needed on firefighting equipment in the field, where conditions are usually anything but ideal. On a recent Sunday morning, Cox was called at 2 a.m. to help get a tractor that was stuck while fighting a fire. He responded to the fire scene and was instrumental in getting the tractor back to work.

“Greg is the go-to-guy for repair advice, not only in the district but across the state,” Watson said. “He is often called by other mechanics to give his thoughts on a situation with a piece of equipment from another district.”

During a busy fire season in 2011, Cox was dispatched outside of his district seven times and was out of town and away from his family for a total of 93 days that year. For many of these dispatches Cox was requested by name because others across the state also recognize the great work that Greg does.

“Greg is one of the most dedicated people to his job that I have been around,” Watson added. “One of Greg’s best characteristics is that he demonstrates that nature with a positive attitude. He genuinely enjoys his job and likes to have fun doing it.”

The NCFA Mourns the Loss of Dr. Bob Cooper Former NCFA Board Member and National Tree Farmer of the Year



Dr. Bob Cooper was named the NCFA's

It is with tremendous regret that the NCFA reports that Miles Robert Cooper, Dr. Bob Cooper to most of us, passed away on Sunday, October 26, 2014.

"Dr. Cooper was an extraordinary combination of intelligence, vision, grace, and of course, intensity," stated the NCFA's Chris Brown, who worked with Cooper as the association's liaison with the Tree Farm program.

"Once Dr. Cooper charted his course, he was going to see it through to a successful conclusion, and you better jump onboard quick with your "A" game ready to go," continued Brown. "He was going to demand it of himself and everyone else around him. But what made him so special was that when you finished

with whatever project it might be, he was always so appreciative and willing to sing the praises of others."

"We are certainly going to miss his leadership. He was a great spokesman for forestry, the forest products industry and Tree Farmers across the state," stated Brown. "Our association and the North Carolina Tree Farm program would not be where it is today without the efforts of Bob and Jean Cooper."

"We send our deepest condolences to Jean and the Cooper family," stated Brown.

Miles Robert Cooper was born in Elizabeth City, NC to Miles Watson and Lucy Old Cooper. He died five days after his 81st birthday. He was a loving husband to Jean Batten Cooper for 58 years and a devoted father to Michael Robert Cooper (wife Linda Worch Cooper) and Timothy Alan Cooper (wife Kathleen Baldwin Cooper).

Dr. Cooper was especially proud of his five grandsons, Miles Robert Cooper II (wife Jordan Puck-



Three Generations of Coopers - Bob and Jean pose for a photograph in 2008 with sons Tim and Mike and three of their grandsons at Meadowbrook Farm.

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(l-r) Kathleen and Tim Cooper pose with Jean and Bob Cooper for a photo after the Coopers were named the Southern Regional Tree Farmers of the Year. The Coopers were named National Tree Farmers of the Year in the fall.

internal medicine and deputy head of the section on hematology/oncology.

Dr. Cooper was named professor emeritus in 2002 and served as director of emeritus affairs from 2003-2014. In 2012, he was recognized with the Distinguished Achievement Award of the Medical Alumni Association of Wake Forest School of Medicine.

During his career in medicine he enjoyed teaching and research, but his first passion was taking care of patients. He also volunteered in the American Cancer Society and was given the St. George's Award, the highest volunteer award for the Society.

Having grown up on a farm in eastern North Carolina, he never lost his interest in land and agriculture. Dr. Cooper renovated a old farm house and raised cattle on Meadowbrook Farm, which is an oasis just outside the Winston-Salem city limits. Eventually, he and Jean converted the land into a certified Tree Farm. A Tree Farm that distinguished the Coopers as the National Tree Farmers of the Year by the American Forest Foundation in 2008.

His faith was the central motivation to all of his efforts, and he passed that faith on to his family. Throughout his life he served as a Sunday School teacher and a deacon.

Memorials may be sent to either:

The Institutional Development Office

Wake Forest School of Medicine

attn: Cooper Family Scholarship

Medical Center Blvd.

Winston-Salem, NC 27157

OR

Capital Campaign,

Knollwood Baptist Church,

330 Knollwood Street,

Winston-Salem, NC 27104.

Mr. and Mrs. Yang Breaking Barriers

As is common with immigrant farmers, language barriers can create a wall. For Catawba County Hmong husband and wife farmers, Chou Yang (husband) and Chou Yang (wife), their desires for natural resource conservation were stronger than language differences. The Yang family sought Natural Resources Conservation Service (NRCS) Farm Bill conservation program participation to help in their land stewardship efforts.



NRCS and the Yang family were determined to communicate, and partnered with Der Xiong, an Immigrant Agriculture Agent for Catawba County. With the translation assistance of Ms. Xiong, the Yangs became interested in, and received, NRCS technical and financial assistance for conservation planning and Seasonal High Tunnel Systems. Today, their cut flower farm operation in Claremont, NC, is actively utilizing technical conservation management assistance and a Seasonal High Tunnel System. The Seasonal High Tunnel System, along with improved natural resource management, will allow them to increase farm profit by having flowers earlier and later in the year, and will help sustain Catawba County's valuable resources. The USDA Service Center in Catawba County is very proud of the partnership with Mr. and Mrs. Chou Yang and their proactive efforts to spread the conservation partnership message and opportunities throughout the Hmong community.

SOURCE: <http://www.nrcs.usda.gov/wps/portal/nrcs/detail/nc/newsroom/stories/?cid=stelprdb1260898>

USDA Invests \$20 Million to Hire 11,000 Youth and Veterans on Forest Lands

WASHINGTON, September 26, 2014 - Agriculture Secretary Tom Vilsack said today that in fiscal year 2014, the U.S. Forest Service invested a total of \$20 million in partnerships that supported work and training opportunities for 11,000 youth and veterans on national forests and grasslands. Service members worked on projects that addressed restoration, hazardous fuels, watershed protection, wilderness stewardship, recreation access, facilities management, trail maintenance, and other natural and cultural resource priorities.

"The partnerships associated with developing the next generation of conservationists offer an opportunity to connect veterans and our young people to the great outdoors," said Agriculture Secretary Tom Vilsack. "This program engages veterans and young people from diverse backgrounds, including underserved populations, and equips them with the knowledge and critical job skills they need to pursue careers in conservation and land management."

"The 21st Century Conservation Service Corps gives young people and veterans real-world experience that

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pays dividends for their career prospects and the health of America's wild places," said U.S Forest Service Chief Tom Tidwell. "This partnership and the people who make it work are a big part of the future of conservation in America."

The Forest Service provided employment opportunities for youth and veterans from coast to coast and in every region, including Hawaii and Alaska. The work accomplished by these youth and veterans was conducted in support of the 21st Century Conservation Service Corps (21CSC), a part of the Obama Administration's "America's Great Outdoors" Initiative. A collaborative effort with public and private partners, the 21CSC puts America's youth and veterans to work protecting, restoring and enhancing America's great outdoors. Through the 21CSC, young people and veterans accomplish meaningful work and gain important personal and professional skills while building a lifelong connection to the outdoors.

The funds invested by the Forest Service were matched on almost a one-to-one basis by partners and exceeded the 2013 performance results for this program by nearly 30 percent. To achieve these outcomes, the Forest Service entered into new partnerships that connected more youth and veterans with national service opportunities, restoring and conserving natural and historic resources on national forests and grasslands.

For example, a \$3.7 million joint funding collaboration with the Corporation for National and Community Service is engaging hundreds of AmeriCorps national service members on public lands projects as part of the 21CSC. A partnership with the Veterans Fire Corps helped employ veterans on the fire line, a place where their military skills - including decisiveness, solid judgment, teamwork and attention to detail - contribute to successful work on the ground. A partnership with the National Fish and Wildlife Foundation helped connect 190 youth to projects on Forest lands. And ongoing partnerships with many of the 140 recognized 21CSC member organizations and additional supporting partners helped to expand opportunities for youth and veterans, and build support for the 21CSC. Today's announcement coincides with tomorrow's celebration of [National Public Lands Day](#) (NPLD), the nation's largest, single-day volunteer effort for public lands. The 156 NPLD projects that are happening tomorrow on forests and grasslands are examples of how much can be done by ordinary citizens. For instance, Montana Conservation Corps members are working with REI, the National Forest Foundation and Mountain Bike Missoula to coordinate volunteers of all ages to improve the Sawmill Gulch Trail, a wilderness area on the Lolo National Forest.

With 21CSC, which provides compensation to participants, USDA and its federal and non-federal partners are building on the legacy of the Civilian Conservation Corps and other conservation corps efforts that followed. While giving young people and veterans important job skills and accomplishing critical work on our public lands, this national public-private partnership is creating a pipeline of conservation citizen stewards and developing the next generation of natural and cultural resources professionals.

Next year, the Forest Service will continue to work with partners to connect more of our youth and veterans with similar opportunities. The charter for this initiative calls for development of "national partnerships to support 21CSC." These partnerships with national non-profit and for-profit organizations enable 21CSC to reach its goal of engaging 100,000 young people and veterans per year in conservation service. Anyone interested in learning more or joining this effort should visit http://21csc.org/join/become_national_partner/. For a full list of member organizations, visit the partner-hosted website at: www.21csc.org.

Director Appointed for National Shortleaf Pine Initiative

Program to Be Run by UT Department of Forestry, Wildlife and Fisheries

By Patricia McDaniels, pmdaniels@tennessee.edu

KNOXVILLE, Tenn. – The forestry coordinator for the National Bobwhite Conservation Initiative, Mike Black, has been appointed as director of the Shortleaf Pine Initiative. Mike Black began his duties November 10, 2014.

Launched in the spring of 2013 and coordinated through the Department of Forestry, Wildlife and Fisheries within the University of Tennessee Institute of Agriculture, the Shortleaf Pine Initiative (SPI) is a collaborative, strategic and energetic response to the dramatic decline of shortleaf pine forests and associated habitats that once covered a vast area from eastern Texas to Florida and up the eastern seaboard to New Jersey. Funding is provided by the U.S. Forest Service with additional administrative support from the Tennessee Department of Agriculture, Division of Forestry.

“Over the past 30 years more than 50 percent of the shortleaf pine forests have been lost, with the most significant declines taking place east of the Mississippi River,” said Keith Belli, head of UT’s Department of Forestry, Wildlife and Fisheries. “Now is the time for a more robust and concerted effort to restore these acres. We’re pleased to be involved and to have Mike leading the effort.”

Research shows that the loss of the shortleaf pine forests negatively impacts an extraordinary diversity of cultural, ecological and economic values centered on wildlife and recreation, water quality and a high-value wood products industry. The SPI represents a broad range of public and private organizations as well as key state and federal agencies currently working in the shortleaf pine ecosystem.

While some restoration efforts are already underway, Black will help draft and administer a range-wide conservation plan for shortleaf pine to optimize restoration strategies, increase coordination among shortleaf stakeholders and maximize the effectiveness of ongoing efforts.

“I am really looking forward to contributing to this challenging conservation effort,” said Black. “Millions of people and wildlife depend on the benefits of this imperiled ecosystem – from jobs, to habitat, to quality of life – the need for a range-wide conservation strategy is more compelling than ever,” he said.

Black is a professional forester with a background in forest industry, private consulting, as a contractor with the Department of Defense. Most recently Black served as the Forestry Coordinator for the National Bobwhite Conservation Initiative. He has spent his career coordinating and promoting the integration of forest and wildlife management conservation and policy.

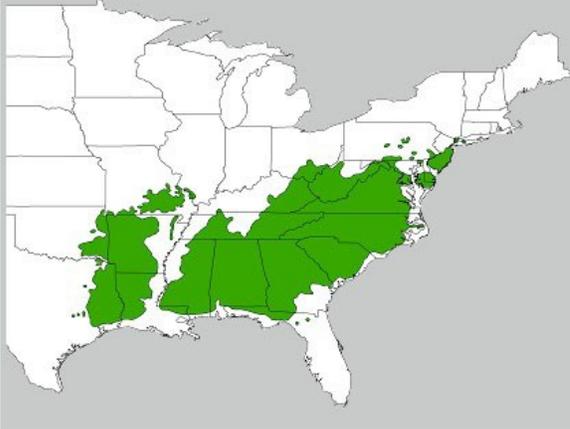
For more information, please visit the project’s website: www.shortleafpine.org



Mike Black has been appointed as director of the national Shortleaf Pine Initiative, which is being coordinated through the University of Tennessee Department of Forestry, Wildlife and Fisheries. Photo courtesy UTIA

The Department of Forestry, Wildlife and Fisheries is celebrating 50 years as a research, teaching and outreach department within the the UT College of Agricultural Sciences and Natural Resources, a unit of the UT Institute of Agriculture. The UT Institute of Agriculture also provides instruction, research and public service through, the UT College of Veterinary Medicine, UT AgResearch and its 10 research and education centers, and UT Extension offices in every county in the state.

Welcome to the Shortleaf Pine Initiative



Launched in the spring of 2013, the Shortleaf Pine Initiative (SPI) is a collaborative, strategic and energetic response to the dramatic decline of shortleaf pine forests and associated habitats that once covered a vast area from eastern Texas to Florida and up the eastern seaboard to New Jersey. Over the last 30 years more than 50 percent of these forested acres have been lost with the most significant declines taking place east of the Mississippi River.

While efforts to reverse these disturbing trends have been made in the past, now is the time for a more robust and concerted effort involving stakeholders across the range. At stake is an extraordinary diversity of cultural, ecological and economic values centered on wildlife and recreation, water quality and a high value wood products industry. With millions of people depending on the benefits of this imperiled ecosystem, the need to develop a range-wide conservation strategy is more compelling than ever.

The SPI represents a broad range of public and private organizations as well as key state and federal agencies currently working in the shortleaf pine ecosystem. While some restoration efforts are already underway, a range-wide conservation plan for shortleaf pine will be developed by September 2014 to identify optimum restoration strategies, increase coordination among shortleaf proponents and maximize the effectiveness of ongoing efforts.

Questions? Comments? Email the [Shortleaf Pine Team](#).

SOIL

Field Guide to Classify Biological Soil Crusts for Ecological Site Evaluation

A new technical guide has been posted to the National Soil Survey Center web site. The *Field Guide to Classify Biological Soil Crusts for Ecological Site Evaluation* is located at http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/ref/#field_guides.

This field guide was written by Dr. Nicole Pietrasiak, now with John Carroll University. Biological soil crusts (also known as microbotic, cryptobiotic, cryptogamic, microphytic soil crusts, or, for short, biocrusts) are crucial components of terrestrial ecosystems. It provides a dichotomous key with details, explanations, and illustrations for biocrust community types. It is best aligned with conditions in areas such as the California Coastal Plain, Southern California Mountains, Sierra Nevada Mountains, Southern Nevada Basin and Range, Mojave Desert, and the Lower Colorado Desert.

Dr. Peitrsiak's work was supported by the NRCS and is being posted for field use and professional evaluation. Please send any comments to the National Leader for Soil Survey Standards, currently [David Hoover](mailto:David.Hoover@lin.usda.gov).

GINSENG IN NORTH CAROLINA

WHAT YOU NEED TO KNOW

American ginseng (*Panax quinquefolius*) grows in rich woods through most of the eastern United States, including the mountains and upper Piedmont of North Carolina. Ginseng has a long history of use in herbal medicine. The buying and exporting of wild-collected ginseng brings in over three million dollars per year to North Carolina, with over 5000 collectors of the native plant receiving \$200-\$300 or more per pound of dried wild-collected roots. The collectors sell to the over 40 registered ginseng dealers in the state, who in turn export the majority of the ginseng to Hong Kong and Singapore.

A pound of wild ginseng is not easy to come by, as the plant is by no means abundant and it takes on average over 300 dried roots to make a pound.

As wild ginseng gets increasingly hard to find, many North Carolinians grow their own. Ginseng may be cultivated in beds with artificial shade, selling for far less than wild roots but producing larger crops much faster. "Woods grown" and "wild-simulated" ginseng, grown in woods with little or no tending, take more years to harvest size but fetch prices approaching those of truly wild roots.

Ginseng trade is monitored by state agencies in cooperation with the U.S. Fish and Wildlife Service, to watch that the wild American ginseng doesn't go extinct through over-collection. In North Carolina the agency overseeing the ginseng trade is the Plant Conservation Program in the Plant Industry Division of the North Carolina Department of Agriculture and Consumer Services (NCDA&CS).

Ginseng is a legally protected plant in North Carolina, ranked as Special Concern, and is subject to certain regulations.

- **Wild ginseng collection in the state is prohibited from January 1 through August 31.** This allows the plants to set seed. During the harvest season September 1-December 31, collectors should replant any ginseng seeds from collected plants in the place where the roots are dug.

- **To collect ginseng from another's land the collector must have written permission from the landowner,** dated and valid for no more than 180 days. The document must be on the collector's person when digging ginseng on that land. **This requirement applies to both public and private lands.** In National Forests, district offices are responsible for such permits. State and national parks, including the Blue Ridge Parkway and the Great Smoky Mountains Na-



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tional Park, do not allow ginseng collection.

- **No state permit is needed to dig ginseng**, only the landowner's permission.

- **Taking ginseng** from another's land with intent to steal is a felony.

- **Diggers should collect only 3-prong plants or larger.** Only roots 5 years old or older can be sold at this time (1999 -2001). Plants with 3 prongs are usually at least 5 years old; 1- or 2-prong plants are too young and should not be dug. This applies to wild and "wild-simulated" ginseng. Diggers need to check about current restrictions each season before digging wild roots, as rules may change. Readers may learn more about responsible harvesting and selling [here](#).

- **A ginseng dealer's permit is required for anyone who buys North Carolina ginseng roots, wild or cultivated, for resale, or who intends to sell roots out of state.** The Plant Conservation Program issues the permits annually. The dealer must follow state regulations on buying, record keeping and export certification. Any ginseng leaving the state must have an export certificate, issued by the local NCDA&CS Plant Protection Specialist. There is no fee for export certification.

Application for North Carolina Ginseng Dealer Permit

- **A ginseng grower or digger needs a North Carolina ginseng dealer's permit** if the grower/digger intends to sell roots directly to an out-of-state buyer rather than to a North Carolina-registered dealer. The permit is needed only when the ginseng is to be sold.

- **No permit is needed to grow ginseng** to be harvested only for the roots. If intending to sell live plants, the grower needs a nursery certificate, issued by the local NCDA&CS Plant Protection Specialist. Growers should keep records to show that their ginseng is not wild, since there is always the possibility that future regulations may restrict the sale of wild ginseng.

- **Anyone collecting or dealing in live ginseng plants** intended for replanting must obtain a Collected Plant Certificate and/or Nursery Dealer Certificate from NCDA&CS. Live ginseng plants are subject to plant pest regulations.

A good source for information on growing ginseng is

Dr. Jeanine Davis

Mountain Horticultural Crops Research and Extension Center

2016 Fanning Bridge Road

Fletcher, NC 28732-9216

Phone (828) 684-3562

Dr. Davis's ginseng publications are available on the Internet at

<http://www.ces.ncsu.edu/depts/hort/hil/spcrop-index.html>

New Frog Discovered Inhabiting I-95 Corridor From Connecticut to North Carolina

Rutgers University—More than a half century after claims that a new frog species existed in New York and New Jersey were dismissed, a team of scientists has proven that the frog is living in wetlands from Connecticut to North Carolina and are naming it after the ecologist who first noticed it.

More than a half century after claims that a new frog species existed in New York and New Jersey were dismissed, a Rutgers researcher and team of scientists have proven that the frog is living in wetlands from Connecticut to North Carolina and are naming it after the ecologist who first noticed it.

"Even though he was clearly on to something, the claim Carl Kauffeld made in his 1937 paper fell short," said Rutgers doctoral candidate Jeremy Feinberg. "We had the benefits of genetic testing and bioacoustic analysis that simply weren't available to Kauffeld to prove that even though this frog might look like the two other leopard frogs in the area, it was actually a third and completely separate species."



The new frog discovered by Rutgers researchers and a team of others living along the I-95 corridor from Connecticut to North Carolina will be named after the ecologist who first noticed it more than a half century ago.

In the paper, "Cryptic Diversity in Metropolis: Confirmation of a New Leopard Frog Species from New York City and Surrounding Atlantic Coast Regions," published in *PLOS ONE*, Feinberg and a team of seven other researchers revealed the scientific name for the new species: *Rana kauffeldi*. The leopard frog, first encountered by Feinberg on Staten Island six years ago not far from the Statue of Liberty, will be commonly referred to as the Atlantic Coast Leopard Frog.

During his career, Kauffeld, who died in 1974 at age 63, worked as the director of the Staten Island Zoo and at the American Museum of Natural History, wrote many books about amphibians and reptiles and is considered to have been an authority on the subject. Although Kauffeld's research was initially recognized by some of his colleagues, Feinberg said Kauffeld faced considerable scrutiny and failed to gain any lasting support for his proposal.

"After some discussion, we agreed that it just seemed right to name the species after Carl Kauffeld," said Feinberg. "We wanted to acknowledge his work and give credit where we believe it was due even though it was nearly 80 years after the fact."

Feinberg, the lead author, encountered the new species six years ago in one of the most developed, heavily populated areas in the world. Two years ago, he and scientists from Rutgers, UCLA, UC Davis, and The University of Alabama -- who had worked together to show that this frog was a brand new species -- made the initial announcement.

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Today, the new research paper, which also includes Joanna Burger, professor in the Department of Cell Biology and Neuroscience in the School of Arts and Sciences, as well as scientists from Yale, Louisiana State University, SUNY College of Environmental Science and Forestry, and the New Jersey Division of Fish and Wildlife, completes that discovery. The paper has provided the critical evidence needed to formally describe and name the new frog and also presents information on the distribution, ecology, and conservation status of this species.

Historically, the new frog was confused with two closely related species -- including one to the north and one to the south -- because it looks so similar. As a result, it was not noticed as a distinct species. But after Feinberg's encounter in 2008, modern technology stepped in. Using molecular and bioacoustic techniques to examine the genetics and mating calls of leopard frogs from various parts of Northeast the scientists were able to positively determine that the frog found living in the marshes of Staten Island was, in fact, a new species that might also be hiding in ponds and wetlands beyond New York and New Jersey.

The news, Feinberg said, became a call to arms to biologists, hobbyists and frog enthusiasts from Massachusetts to Virginia to go out, look, and listen in order to determine if the new frog -- mint-gray to light olive green with medium to dark spots -- could be found beyond the New York metropolitan area.

Over the last two years, many frog lovers, including some involved with the North American Amphibian Monitoring Project -- a government project that observes frog habitats to determine if populations are declining -- have provided crucial information about where the frogs are living, what they look like and how they sound. One volunteer, in fact, noticed the new species' unusual and distinct 'chuck' call, and provided information that ultimately helped confirm populations of the new species in both Virginia and North Carolina.

"If there is a single lesson to take from this study, it's that those who love nature and want to conserve it need to shut down their computers, get outside and study the plants and animals in their own backyards," said co-author Brad Shaffer, professor in UCLA's Department of Ecology and Evolutionary Biology, who described the discovery as biological detective work. Although fun and satisfying work, the goal is to protect the biodiversity of the planet, he said.

Scientists say the fact that this new species -- which brings the total number of leopard frogs in the world to 19 -- remained under the radar in a highly populated area spanning eight east coast states and several major North American cities stretching 485 miles -- is remarkable.

"It is incredible and exciting that a new species of frog could be hiding in plain sight in New York City and existing from Connecticut to North Carolina," said Burger, Feinberg's advisor. "The process of recognizing, identifying and documenting a new species is long and arduous but it is important for our understanding of the wide ranging wildlife in urban as well as other environments."

The above story is based on [materials](#) provided by [Rutgers University](#). The original article was written by Robin Lally. *Note: Materials may be edited for content and length.*

Jeremy A. Feinberg, Catherine E. Newman, Gregory J. Watkins-Colwell, Matthew D. Schlesinger, Brian Zarate, Brian R. Curry, H. Bradley Shaffer, Joanna Burger. Cryptic Diversity in Metropolis: Confirmation of a New Leopard Frog Species (Anura: Ranidae) from New York City and Surrounding Atlantic Coast Regions. *PLoS ONE*, 2014; 9 (10): e108213 DOI: [10.1371/journal.pone.0108213](https://doi.org/10.1371/journal.pone.0108213)

FOREST HEALTH

WARREN COUNTY JOINS QUARANTINE AREA FOR EMERALD ASH BORER

RALEIGH -- Warren County is the latest to fall under quarantine rules restricting the movement of hardwood firewood, ash nursery stock and other ash materials after emerald ash borers were confirmed in trees in the county. Agriculture Commissioner Steve Troxler signed an emergency quarantine order allowing the expansion.

Granville, Person and Vance counties were already under quarantine from when the pest was first detected in the state in mid-June.

North Carolina is the 20th state in the country to confirm the presence of the destructive pest, following the discovery of an adult beetle and other signs of borer activity in trees in Granville County by staff with the N.C. Forest Service. Additional surveying found signs of emerald ash borer activity in the bordering counties of Person and Vance.

“Following the initial detection of emerald ash borer in the state, our staff began more intensive surveying and trapping in neighboring counties and those efforts yielded more borer activity, which we thought was likely,” Troxler said. “We will continue to look for the presence of emerald ash borers and ask for the public’s cooperation with these quarantine rules to restrict the movement any further.”



An adult emerald ash borer (Granville County). Image: NCFS.

The beetle was first detected in the United States in Michigan in 2002. It is responsible for the death or decline of tens of millions of ash trees across the country.

Under the state quarantine, all hardwood firewood and plants and plant parts of the ash tree -- including living, dead, cut or fallen, green lumber, stumps, roots, branches and composted and uncomposted chips -- cannot be moved outside the four counties.

The N.C. Department of Agriculture and Consumer Services’ Plant Industry Division and N.C. Forest Service are working in cooperation with the U.S. Department of Agriculture’s Animal and Plant Health Inspection Service.

Symptoms of emerald ash borer in ash trees include a general decline in the appearance of the tree, such as thinning from the top down and loss of leaves. Clumps of shoots, also known as epicormic sprouts, emerging from the trunk of the tree and increased woodpecker activity are other symptoms. The emerald ash borer is not the only pest that can cause these.

Emerald ash borers overwinter as larvae. Adult beetles begin to emerge from May to June and can be found in the summer months. The adult beetle is one-fourth to a half-inch long and is slender and metallic green. When the adults emerge from a tree, they leave behind a D-shaped exit hole. The larvae can also create serpentine tunneling marks, known as feeding galleries, which are found under the bark of the infested trees.

Home and landowners are encouraged to report any symptomatic activity in ash trees to the NCDA&CS Plant Industry Division hotline at 1-800-206-9333 or by email at newpest@ncagr.gov. The pest can affect any of the four types of ash trees grown in the state.

Autumn brings the fall of tree seed *Bumper crop aids state's seedling program*



RALEIGH – This autumn, tons of seed from many different tree species have hit the ground in record amounts. And squirrels weren't the only ones looking for it.

N.C. Forest Service staff from across the state collected the seed used to grow more than 50 types of tree seedlings for the agency's nursery program. The NCFS sells these native seedlings to landowners at low cost for a variety of purposes, such as reforestation, wetlands mitigation, aesthetic improvement and wildlife habitat creation.

“While trees make some seed almost every year, a crop of this size only occurs about every four or five years,” said James West, head of the [NCFS Nursery and Tree Improvement Program](#). “Things have to be just right when it comes to rain, temperatures and wind events. If one of those parameters is off, the seed yield is lower.”

This fall has proven to be a bumper crop year for most species across the state, West said. The weather conditions for the last two years have been favorable for trees to produce seed such as acorns, drupes and cones. In some species, seed production can take two years to complete.

This year's heavy seed crop has enabled the nursery staff to process seeds from many species and prepare them for long-term storage. This will ensure that seedlings will be available to North Carolina landowners in future years when tree seed may not be as plentiful.

Landowners interested in planting trees this winter or spring may order their seedlings by calling 1-888-NCTREES or visiting <http://nc-forestry.stores.yahoo.net>.

Fall Planting for Bare-Root Trees

From Arbor Day E-News

When is it too late to plant trees in the fall? It's a question we're commonly asked. In the South, this isn't an issue. In northern climates, the old rule of thumb is that if the pond is frozen enough for skating, it is too late for planting. Essentially—although the weather may be turning unpleasant—if you can get a spade in the ground, you can still safely plant your new trees. It is only too late when the ground is frozen solid, which usually doesn't happen until well into winter.

And fall planting can be worth some cold hands! Tree roots remain active throughout the winter, taking advantage of moisture from rain or snow. Trees planted in the fall also get a head start on establishing themselves in the spring through vigorous root elongation and a flush of twig growth.

Time to Pay More Attention to Deer on the Roadways

RALEIGH — The arrival of the fall season not only means dropping temperatures and leaves, but also an increase in the chances of a collision with a deer across North Carolina. Between 2011 and 2013, nearly half of the more than 61,000 animal-related crashes took place in October through December. About 90 percent of those involved deer.

A [N.C. Department of Transportation study](#) shows that in 2013, there were 20,308 animal-related crashes, a slight increase over the 2012 figure, but still well below the numbers reported in 2010 and 2011.

Over the past three years, animal-related crashes claimed 18 lives, injured more than 3,400 drivers and passengers, and caused more than \$149 million in damages.

“Drivers need to be careful on the roads all the time, but even more so over the next few months,” said NCDOT Director of Mobility and Safety Kevin Lacy. “Increased deer activity and decreasing daylight hours mean vigilance by motorists needs to increase for their own safety and the safety of others.”

For the 11th year in a row, Wake County led all counties in the number of animal-related crashes with 1,135, a slight increase over 2012 figures. That is primarily due to the combination of decreasing amounts of wooded area in the county and the increasing number of drivers and road mile usage.

Guilford County had more than 500 fewer animal-related crashes (620) and was the runner-up for a second year in a row. Duplin and Pitt counties tied for third with 539 animal-related crashes, followed by Randolph (499) and Johnston (492) counties. Rounding out the top 10 were Columbus, Rockingham, Mecklenburg and Pender counties. Counties in the far western section of the state, where there are considerably fewer drivers and road mileage, once again reported the lowest number of crashes. Swain County had the fewest number of animal-related crashes with 5, falling just below Graham (9) and Jackson (11) counties.

Deer are on the roadways more during the fall into winter months due to the hunting and mating seasons. They also travel more at dawn and as it grows dark in the evenings, with the largest number of crashes coming between 5 and



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8 a.m., and 6 and 10 p.m. In addition to more deer moving about and crossing roads at those times, decreased driver visibility makes it more difficult to see animals on or near roadways.

[NCDOT](#) offers the following suggestions for motorists to avoid being in a deer-vehicle crash:

- Slow down in posted deer crossing areas and heavily wooded areas, especially during the late afternoon and evening;
- Always wear your seat belt. Most people injured in deer-vehicle crashes were not wearing their seat belt;
- Statistics indicate most deer-vehicle crashes occur in areas where deer are more likely to travel through, such as near bridges or overpasses, railroad tracks, streams and ditches;
- Drive with high beams on when possible, and watch for eyes reflecting in the headlights;
- Remember that deer often travel in groups, so do not assume that if a deer crosses the road, there won't be others following;
- Slow down and blow your horn with one long blast to frighten the deer away;
- Increase the distance between your vehicle and other cars, especially at night. If the car ahead of you hits a deer, you may also become involved in the crash;
- Do not swerve to avoid a collision with deer. This could cause you to lose control of your vehicle, flipping it over, veering it into oncoming traffic or overcorrecting and running off the road, causing a more serious crash;
- Do not rely on devices such as deer whistles, deer fences or reflectors to deter deer as these devices have not been proven to reduce deer-vehicle crashes; and

If your vehicle strikes a deer, do not touch the animal. A frightened and wounded deer can hurt you or further injure itself. The best procedure is to get your car off the road if possible, and call 911.

Revisions Made to Captive Cervid Licenses and Permits

RALEIGH, N.C. (Oct. 30, 2014) — The N.C. Wildlife Resources Commission today approved temporary rules allowing the issuance of permits and licenses for “farmed cervid” facilities. Cervids are the family of mammals that includes deer, elk and moose. The temporary rules for permits and licenses apply only to “farmed cervids,” defined as any member of the deer family that is not a white-tailed deer or an elk. The new rules are required by legislation adopted by the General Assembly earlier this year.

Session Law 2014-100, the State Budget Act, mandated the Wildlife Resources Commission adopt rules for the issuance of new captivity licenses for cervid facilities. During the public comment period for the temporary rules, the Commission became aware of potential legal barriers to issuance of licenses for white-tailed deer and elk. In today's actions, the Commission approved permitting and licensing rules pertaining only to farmed cervids, which are not affected by the potential legal barriers. The Commission also increased the mandatory testing age for chronic wasting disease in all captive deer that have died, from six months to 12 months.

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The Commission is continuing to review any legal barriers to the issuance of new licenses for white-tailed deer and elk. Any further proposed changes by the Commission to the captive cervid regulations will be available for review and public comment.

For more information or to request a farmed cervid license application, contact the N.C. Wildlife Resources Commission, 1701 Mail Service Center, Raleigh, N.C. 27699, online at www.ncwildlife.org.

Corolla Wild Horses

Descended from the Spanish Mustangs brought to the Outer Banks by early explorers, the Corolla Wild Horses have roamed across the Currituck Outer Banks for approximately 400 years. These horses are such a significant cultural and historic resource to our area that the Spanish Mustang was designated as the official state horse of North Carolina in 2010.

These wild horses roam freely in Corolla and are most commonly found in the four-wheel-drive areas of the beach. It is illegal to intentionally come within 50 feet of the horses, so that means no petting or feeding, but they can be appreciated from a distance on one of our wild horse tours. We have several tour companies that can get you within picture-taking distance while also giving you a great history lesson about the horses and the area itself.



Corolla Wild Horse Fund

The Corolla Wild Horse Fund was formed in 1989 to increase awareness about the wild horses, to protect them and respond to emergencies, and to responsibly manage the herd. If you are interested in adopting a wild horse, making a donation to the Fund, or would like more information can contact the Fund at 252-453-8002 or go to their website.

Corolla Wild Horse Museum

Located in Historic Corolla Village, the Wild Horse Museum is operated by the Corolla Wild Horse Fund. The museum is free and open to the public year-round, and it houses displays and exhibits to educate visitors about the wild Spanish Mustang herd that roams the northern beaches of the Currituck Outer Banks. During the summer, the museum sponsors children's activities, including live visits and rides with tamed mustangs.



Guided Horse Tours

A guided off-road tour is a great way to see the famous Corolla wild Spanish Mustangs. These tours also give visitors a chance to appreciate Corolla's natural beauty and see other wildlife. Guided tours can be booked through a wild horse tour company or through the Corolla Wild Horse Fund. Tours sell out during the summer season, so book them early!

WOODLAND OWNER ASSOCIATIONS

Do you sometimes feel you would like to have a group of like-minded individuals to discuss your woodland issues with? Wouldn't it be great to be part of a group that allows you to share information about loggers, consultants, prices, products, cost-share, agency support, and many other issues that you face alone as landowners. Landowner associations offer information sharing and networking opportunities. North Carolina woodland owners are starting to see an increase in various types of associations to participate in. These range from national and state-wide to county and multi-county associations. Who do you choose? You may participate in any or all these associations but do a little research. See which ones benefit you directly and closely align with your ideals. Below is a brief description of each taken directly from the association website (*additional notes not from the official website are in italics*). If no website is given, the phone number of the mail contact will be provided.

National Associations

National Woodland Owners Association (NWOA) <http://www.woodlandowners.org/>

The National Woodland Owners Association (NWOA) is a nationwide organization made up of non-industrial private woodland owners with offices in the Washington DC area. Membership includes landowners in all 50 states and Canada and also includes affiliations with 36 state and 287 county woodland owner associations throughout the United States.

Founded by non-industrial private woodland owners in 1983, NWOA is independent of the forest products industry and government forestry agencies. NWOA works with all organizations to promote non-industrial forestry and the best interests of woodland owners. Some of these organizations include: The National Council on Private Forests, Natural Resources Council of America, National Forestry Association, and Society of American Foresters.

Forest Landowners Association (FLA) <http://www.forestlandowners.com/>:

Private forest landowners protect America's natural resources. The Forest Landowners Association (FLA) protects private forest landowners. Since 1941, FLA has provided its members, who own and operate more than 40 million acres of forestland in 48 states, with education, information, and national grassroots advocacy, which enables them to sustain their forestlands across generations. FLA's outreach on behalf of private forest landowners nationwide enhances their forestland management practices and stewardship, and provides peace of mind that they have an advocate working to bring them richly deserved compensation for their work that safeguards America's forestlands. *Typically landowners with >1000 acres join this association.*

NC State-Wide Associations

NCWoodlands [http://www.ncwoodlands.org:](http://www.ncwoodlands.org;)

NCWoodlands is an independent grassroots not-for-profit organization that provides its members with a voice on national, state, and local issues affecting North Carolina's private woodlands. **Our mission** is to advance the interests of North Carolina's woodland owners and to encourage responsible stewardship of their property. We also **seek to inform** all North Carolinians on the **benefits of forestry** which include wealth creation, more wildlife, cleaner water, fewer wildfires, and healthier, more productive forests. *NCWoodlands is a recently created state affiliate of NWOA and membership is growing.*

North Carolina Forestry Association (NCFA) <http://www.ncforestry.org/>:

The NCFA, the state's oldest conservation organization, was established in 1911. Today it is a private, nonprofit partnership of more than 4,200 forest managers, landowners, mill operators, loggers, furniture manufacturers, educators and others concerned about the long-term health and productivity of the state's forest resources and the industries they support.

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Mission Statement: The North Carolina Forestry Association actively promotes healthy, productive forests by supporting the efforts of landowners and forestry-related businesses and organizations who responsibly manage or use forests.

The NCFA seeks to serve its membership through four major programs – Legislative Affairs, Training for Forestry Professionals, Education and Communications.

North Carolina Tree Farm Program (NCTFP)<http://www.nctreefarm.org/index.html>:

Tracing its roots back to the 1940's, The American Tree Farm System can lay claim to being the oldest form of certification or recognition system for the practice of growing trees and maintaining sustainable forests in America. For generations, American landowners and farmers have proudly posted their Tree Farm signs as a way of displaying their stewardship values. "Our sign has been out there in the woods for some 60 years," stated Dave Woodmansee, a Co-Chair of North Carolina Tree Farm. "Most folks recognize the sign means that the forest is being well-managed."

Tree Farm has gained impressive momentum over the past 9 years and tree farmers may gain certification for certain emerging "green wood" markets. A management plan must be developed and reviewed by a Tree Farm Inspector prior to acceptance to this group. While not an association per se, NCTFP does offer the ability to network with woodland owners and agencies through annual state and national meetings.

County and Multi-County Level Woodland Owner Associations

Cape Fear Forest Landowners Network

Membership: Cumberland, Bladen, Sampson, and Robeson Counties, however anyone is invited to attend.

Location: Rotates through each county

Meets: Spring and Fall meetings with tour, also plans 2-hour indoor meetings Jan- Mar in each county.

Dues: No cost

Contact: Colby Lambert

at colby_lambert@ncsu.edu or call 910-321-6875

Caswell Area Forestry Association

Membership: 60 private forest landowners

Location: historic Caswell County courthouse, Yanceyville, NC

Meets: 2-3 times per year

Dues: none

Contact: Jim Long at jmlong37@mebtel.net

Central Carolina Forestry Club

Membership: Open to all who support the objectives of the club but woodland owners in Anson, Chatham, Cumberland, Harnett, Hoke, Lee, Montgomery, Moore, Richmond, Scotland, and Stanley County are highly encouraged to join.

Location: JFR Barn Steakhouse, Southern Pines, NC

Meets: Second Tuesday monthly September – May, also with separate December holiday and May cookout meetings

Dues: \$20 Per Year

Contact: Jason Lefler, President,

at jmlefler@embarqmail.com or Pat Wefel, Secretary-Treasurer at wefel@aol.com

Harnett County Forestry Association

Membership: Primarily Harnett County residents but all are welcome

Location: Harnett County Agriculture Center, Lillington, NC

Meets: Quarterly

Dues: \$15 Per Year

Contact: Gary Pierce at gary_pierce@ncsu.edu or call 910-893-7530

Lee County Forestry Association

Membership: Lee County residents but all are welcome

Location: Tony's Seafood Restaurant, Sanford, NC

Meets: 3 times per year

Dues: \$6 per family

Contact: Stephanie Romelczyk

at stephanie_romelczyk@ncsu.edu or call 919-775-5624

Warren County Forestry Club

Membership: Warren County residents but all are welcome

Location: varies

Meets: annual banquet and periodic tours

Dues: None

Contact: Paul McKenzie at paul_mckenzie@ncsu.edu or call 252-438-8188

(Continued on page 21)

January 9-14
American Farm Bureau Federation's 96th
Annual Meeting and Convention.
San Diego, CA.

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Wilson County Forestry Association

Membership: Wilson County residents but all are welcome
 Location: Wilson County Agriculture Center, Wilson, NC
 Meets: January, February, March, with a tour in November
 Dues: None
 Contact: Billy Little at billy_little@ncsu.edu or call 252-237-0111

County Extension Email Lists

These are not formal associations or clubs but are active forestry workshops or meetings conducted by County Extension Agents. These are also excellent places to meet with your peers and share ideas and information. In many instances these serve as “informal associations”.

Anson County Forestry Email List

Membership: All are welcome
 Location: Anson County Agriculture Center, Wadesboro, NC
 Meets: Schedule Varies
 Dues: none
 Contact: Aimee Marshall at aimee_marshall@ncsu.edu or call 704 694-2415

Randolph County Forestry Email List

Membership: All are welcome
 Location: Randolph County Cooperative Extension Office, Asheboro, NC
 Meets: Annual Field Days, Evening Workshops
 Dues: none
 Contact: Mary Helen Ferguson at maryhelen_ferguson@ncsu.edu or call 336-318-6000

Vance County Forestry Email List

Membership: All are welcome
 Location: Vance County Agriculture Center, Henderson, NC
 Meets: Most months
 Dues: none
 Contact: Paul McKenzie at paul_mckenzie@ncsu.edu or call 252-438-8188

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

View Interactive Map [Forestry Groups in NC](#)

FIRE

Proper disposal of ashes from stoves, fireplaces could save your home

RALEIGH – With the arrival of cold weather, many North Carolinians are beginning to use their wood-burning stoves and fireplaces. The N.C. Forest Service reminds stove users to never dump hot ashes or coals into a wooded area. If you do, you’re risking not only your home, but your neighbor’s as well.

In Mitchell County recently, an eight-acre fire on Humpback Mountain damaged two homes. The suspected cause of the blaze was stove or fireplace ashes that had been dumped outside a residence.

“Despite more than an inch of snow on Halloween night, the low humidity and dry fuels led to an intense fire that burned through a hardwood stand with 5-foot flames in the hardwood litter and flames reaching 13-15 feet in the laurel and rhododendron,” said Greg Smith, district forester. “The N.C. Forest Service and four local fire departments arrived on scene to find a home on fire. While crews were able to save both structures, one suffered fairly significant damage.”

The simple solution to preventing this type of fire is to properly dispose of stove ashes, Smith said. Soak them in water in a metal bucket, stir them about, or only put them in an area where the wind won’t cause them to spread to combustible fuel such as leaves, pine needles, or other forest litter.

For more fire prevention tips, visit <http://ncforestservice.gov> or call your county ranger’s office.

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



Board of Agriculture Ap-



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.