

N.C. Forest Stewardship News



N.C. Forest Stewardship Program Newsletter
N.C. Forest Service — NCDA & CS



Prescribed Fire Recognition for Landowners

By Carla Freeman

Fire is a natural part of many forest ecosystems and historically, fire occurred frequently throughout North Carolina. Many of our fire dependent forests require fire to remain healthy and productive. Fire was also part of everyday life



The first prescribed fire recognition sign was presented to Hemlock Bluffs Nature Preserve supervisor Mark Johns (center). The sign was presented by Kenny Griffin, NCFS Hillsborough district ranger (right).

for Native Americans and early settlers. It was used to clear areas for hunting and foraging, promote habitat for important wildlife species and reduce pest populations, among other reasons.

As the population has increased across North Carolina, the use of prescribed fire has decreased. Likewise, there is a lack of understanding about the natural role that fire plays within our state. This reduction in fire has resulted in a buildup of vegetation that has fueled increasingly intense wildfires. This has also allowed undesirable plants to outcompete fire dependent native species, which rely on regular burning regimes.

Over time, prescribed burning professionals and landowners in North Carolina have returned to the age-old practice of reintroducing fire into our forests. These successes have been supported by the shift in public perceptions through science-driven recommendations and more fire on the landscape.

Recognizing the need for prescribed fire, the Forest Stewardship program partnered with others in the N.C. Forest Service to encourage and promote landowners who manage their forests with prescribed fire. The idea was to provide landowners who implement prescribed fire on their forestland with recognition signs to be displayed on their property at no cost. That idea became a reality during the 2020-21 prescribed burn season, and the signs, like the one pictured, became available to qualifying landowners.

If you are a landowner actively managing your property with prescribed fire, find out if you are eligible to receive a prescribed fire recognition sign from the N.C. Forest Service. To be eligible for a sign, a landowner must have the following: a forest management plan written within the last 10 years; conducted at least two prescribed fires within the last 10 years and in accordance with the management plan; and, conducted all burns in accordance with the N.C. Prescribed Burn Act.

For more details about this program and to see if you are eligible for a prescribed fire sign, contact your local NCFS county ranger’s office. Contact information is available at <https://www.ncforestservice.gov/contacts/>.

Inside This Issue:

Prescribed Fire	1
Herbicide Application	2-3
Forest Economics	4-5
People	6-7
ForestHer NC	8-9
Recognition/Upcoming Events	10

Herbicide Application

By Phil Wallace

Tips for a Successful Herbicide Application

Herbicides are commonly used to control unwanted, competing vegetation on woodlands. Different chemicals and rates may be prescribed depending on objectives, species present, timing of application, soils present, and whether it is to take place before (site preparation) or after crop trees have been planted (release treatment). Herbicides may be applied on the ground by hand using a backpack sprayer or with tractors such as skidders or farm tractors. They can also be applied from the air by helicopter.

Many herbicide projects take place during summer and early fall. As these projects are getting underway, now is the time for landowners to plan and have conversations with those involved in their project.

Most landowners opt to have a contractor conduct the application. When financial assistance or cost share is involved, it is the landowner's responsibility to ensure the contractor adheres to the policies of the program being utilized. Payments may be delayed or denied if program guidelines are not followed.



(Photo: USDA Forest Service, Bugwood.org)

While the tips discussed below relate to financial assistance programs administered by the N.C. Forest Service, most are universal since other cost share programs have similar requirements. Following these tips will help you avoid many common pitfalls associated with herbicide application projects involving financial assistance programs. If you foresee changes to a plan or have questions, contact your local NCFS county ranger.

1. Communication is essential.

When landowners take advantage of cost share or other financial assistance, communication becomes even more important. Maintaining an open dialogue between the landowner, contractor, consulting forester and any others involved helps ensure a project goes smoothly. Consistent communication also minimizes the chance of payment being delayed or denied. Frequent status updates are essential for all involved parties. Especially if modifications to the original agreement occur.

2. When requesting cost share, you must receive a cost share approval letter before beginning any work. Preplanning and securing a contractor are fine, however, if an area is sprayed before the date of the approval letter, payment will be denied.

Additional information

- **Private Forestry Service Providers:** https://ncforestservice.gov/Managing_your_forest/contract_services.htm
- **NCDA&CS Pesticide Section:** <http://www.ncagr.gov/SPCAP/pesticides/>
- **Cost share information:**
 - ◇ https://ncforestservice.gov/Managing_your_forest/fdp.htm
 - ◇ https://ncforestservice.gov/Managing_your_forest/eqip.htm

Herbicide Tips continued

3. Follow the herbicide prescription and forest management plan. Most financial assistance programs will require a forest management plan. These plans may provide specific herbicide prescriptions and instructions or general recommendations. When general recommendations are provided, a specific prescription must be added as an addendum. A prescription must include:

- a. Timing of application
- b. Trade name of herbicide
- c. Rate
- d. Carrier (water, oil, etc.)
- e. Adjuvant type and amount
- f. Volume of mix per acre or stem
- g. Application method (ground or aerial)
- h. Objective of prescription
- i. Map with the location of the area to be sprayed and, if present, sensitive areas or buffers

The N.C. Forest Service prefers to use a Herbicide Application Plan (HAP) to document specific prescriptions that are planned.

Prescription Example – “Release of loblolly pine by aerial application of one pint of Arsenal® per acre. 1 quart of Cidekick® (surfactant) will be added to each 100 gallons of mix (water + chemical + surfactant). Total spray volume of 10 gallons of mix per acre should be applied by helicopter and microfoil boom between Sept. 1 and Sept. 30.”

4. Prescriptions or changes to prescriptions must be approved by the N.C. Forest Service. In addition to funding approvals, an authorized NCFS representative must also approve a specific herbicide prescription before the herbicide is applied. This can become an issue when an applicator or other party writes or changes the prescription without notifying the NCFS. Any modifications to the original approved prescription must be reviewed and approved by the NCFS before the herbicide is applied.

5. Follow the Label! It's the Law! All prescriptions must adhere to the herbicide label. Herbicide labels specify exactly how the product may be applied and what rates are acceptable. Any use not consistent with the label is a violation of both state and federal law. The N.C. Forest Service will not approve any prescriptions that violate product labels.

6. The timing of herbicide application is essential. Another common mishap is mistiming of the application. Cost share projects sprayed late or outside the prescription timeframe will result in delayed or denied payments. The NCFS has seen a trend in recent years of applicators applying herbicide later into the fall with some tracts being sprayed as late as November. It has been our experience that the effectiveness of most herbicide applications is greatly reduced when conducted within 2-3 weeks of the first hard freeze. This is especially true when applying imazapyr (Arsenal/Chopper).

7. Ensure your contractor notifies the N.C. Forest Service before spraying begins. The NCFS requires notification of application, and when workloads allow, a NCFS representative will be on-site while spraying is conducted. This requirement is often overlooked, resulting in delays or denial of cost share payments to the landowner. Again, communication is critically important. Contractors should also supply a summary or contractor record of spray for required documentation and recordkeeping.

Note: The N.C. Forest Service will not write or enforce herbicide application contracts, handle payments or settle disputes between contractors and landowners.

The Disconnect between Pine Sawtimber and Lumber Markets in the southern United States

Amid the looming COVID-19 pandemic, both housing and lumber markets continued to surge in the first quarter of 2021. In March 2021, U.S. housing starts were up about 19% to a seasonally adjusted annual rate of about 1.74 million units, the highest point since late 2006. The lumber prices also continued to soar up throughout the U.S. regions. Some of the Southern Yellow Pine (SYP) lumber grades closely followed the greatly improved housing markets and have been reportedly over \$1,100 per thousand board feet lately.

However, stumpage prices have been flat or trending downward in recent periods. As depicted in Figure 1, the gap between the lumber and timber prices has widened considerably during the COVID-19 pandemic. In fact, the statewide average pine sawtimber prices in North Carolina have been flat since 2009, meanwhile the price for southern yellow pine (eastside) #2, 2X4 8' lumber grade has increased more than fivefold during the same time period. Most of the recent publications have pointed out the supply-demand imbalance as a main answer for this gap between lumber and timber markets.

To understand this better, let's scrutinize the market dynamics of timber and lumber markets. The lumber markets experienced a huge boost across the board during the pandemic by improved housing markets, do-it-yourself home remodeling projects in the lockdown periods, record low mortgage rates, and stimulus checks. Despite record high lumber prices, not much of the impact has been transferred to timber markets in the U.S. South. While the labor shortage throughout the supply chain exacerbated by the pandemic and a decline in harvest operations could be possible reasons, the wall of wood resulting in oversupply of logs in the market is the main factor describing the widening gap between lumber and timber markets.

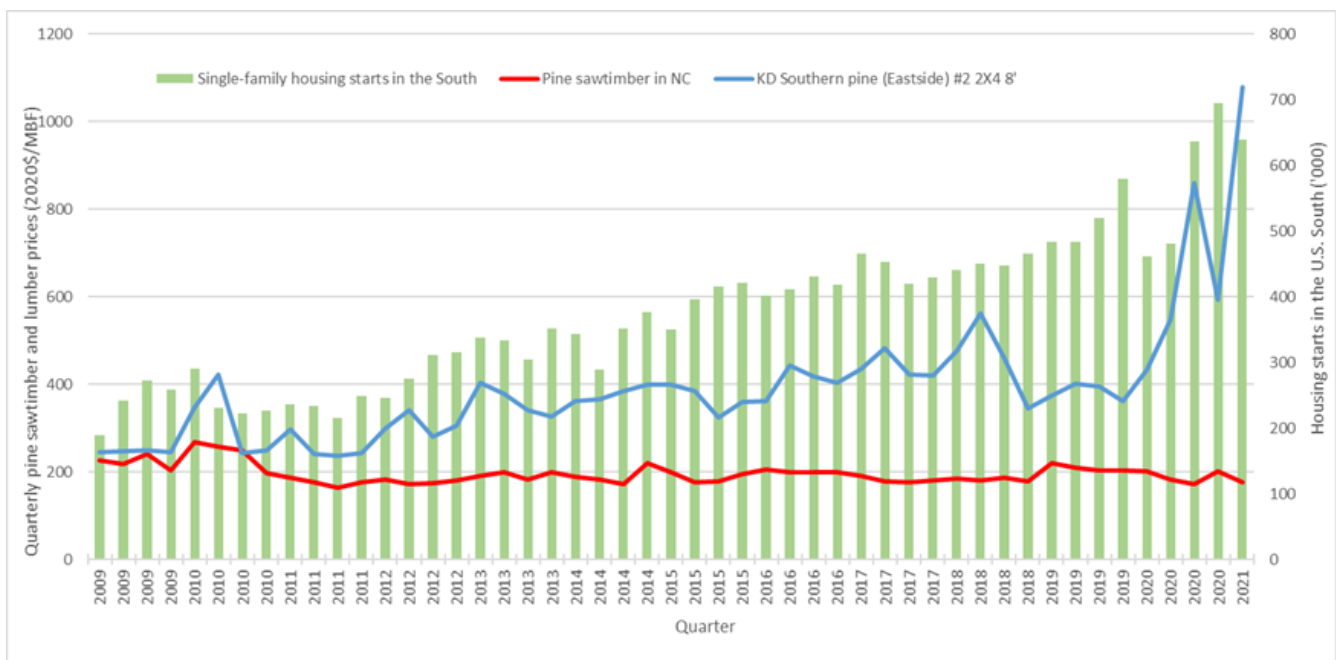


Figure 1. The widening gap between pine lumber and timber prices in North Carolina (Data sources: Timber-Mart South, RISI Info and U.S. Census)

Forest Economics continued

Figure 2 shows projected pine sawtimber inventory in North Carolina regions soon under current harvest and market demand scenarios. Pine sawtimber is expected to be available for harvest even higher in the Coastal Plain and Piedmont geographical regions.

Under current sawtimber harvest rates, it is projected that North Carolina's Southern Coastal Plain and Piedmont regions will have about 10% more sawtimber by 2030 (Figure 2). This market scenario is similar throughout the southern pine wood basins in the South. Until more mills open and compete for wood in local markets, regardless of lumber market movements, sawtimber prices in North Carolina are expected to remain stable or trend downward for the next few years.

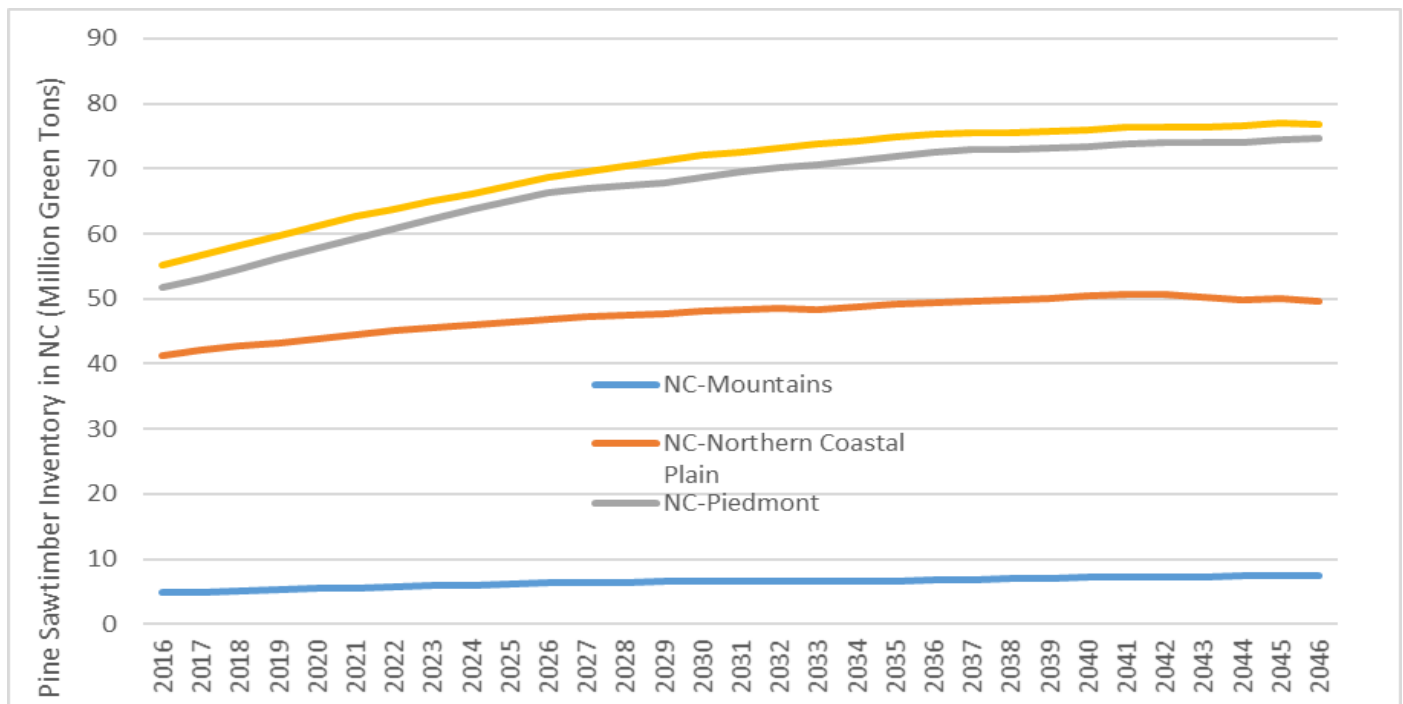


Figure 2. Pine sawtimber inventory in North Carolina is projected to accumulate even higher under the current demand scenario (Source: Sub-Regional Timber Supply Model, SOFAC, NCSU)

Landowner Resources:

Selling Timber

- <https://forestry.ces.ncsu.edu/forestry-selling-timber/>

North Carolina Quarterly Price Reports

- <https://forestry.ces.ncsu.edu/forestry-price-data/>

Economic Contribution Data

- <https://forestry.ces.ncsu.edu/economic-impact-data/>



People

By Ron Myers

N.C. Forest Service welcomes Jonathan Murray as new Forest Stewardship and Forest Legacy Coordinator

Jonathan Murray has worked with the N.C. Forest Service since 2013 and recently received a promotion to his current role as the forest stewardship and forest legacy coordinator beginning in July 2020.

FSP News: Jonathan, give us a little background about you and your interests.

JM: I grew up in rural Nash County and from a young age, I enjoyed being outside with my dad and brother. My father grew up on a small family farm, and he has always had a great understanding of taking care of the land and it taking care of you. As a child, my dad taught me the joys of growing your own food and working the land in our family garden. This is where my passion for land management began.

My dad also enjoyed being an outdoorsman, and he introduced me to hunting and fishing at the age of 3. I grew up hunting and fishing in my free time, and these activities are still some of my favorite hobbies. I also enjoy cooking for friends and family. I really enjoy the simple life and just spending time at home with my wife and our 3-year-old daughter.



Jonathan Murray and Family

FSP News: Tell us about your education and any notable work experiences before becoming the FSP coordinator.

JM: I attended N.C. State University and majored in forest management. I graduated with a B.S. in forest management in 2010. After graduation I worked as a forestry tech for a local consulting forester. I didn't work there long before I decided to move on to become a timber buyer. I have to say this was one of the jobs in my career that I learned the most from. It taught me a lot about loggers/logging and timber sales/purchases. I have the utmost respect for timber buyers, loggers and consulting foresters as a result of this work experience. None of them have an easy job and work long hard hours dealing with a lot of stress. So, thank you to those that serve in these careers!

After working as a timber buyer, I decided it was time for another change of pace and that's when I started my career with the N.C. Forest Service as a service forester in our Elizabeth City District 7 office. This was also a very rewarding experience as I had not lived that far away from Nash County in my entire life. I met some of the nicest, most genuine people I have ever met in my life while working in District 7. I was able to work with veteran county rangers and had an awesome supervisor.

NCFS District 7 staff taught me the important role of a service forester and made me a better forester for the NCFS and the landowners I served. After working in District 7 for a little more than a year, I had the opportunity to lateral into a service forester position in Rocky Mount, District 5. My wife was super happy we were able to get closer to home, but I still miss District 7 from time to time. I worked as a service forester in District 5 for three years and then received a promotion to assistant district forester for District 5. I worked as an assistant district forester for three years with a 3-month "break" when I went to work as a sustainability forester for a pellet mill. It just was not my thing so I came back to District 5 as the assistant district forester. My six years in Rocky Mount were very rewarding as well. The entire staff of District 5 taught me a lot, and I will forever be grateful that I was able to work and serve those communities where I grew up.

People continued

In July 2020, I received a promotion to my current position as the forest stewardship and forest legacy coordinator for the NCFS. While only holding this position for just over a year, I can say it has been a great career move. I am really enjoying both programs and serving NCFS employees and landowners throughout North Carolina in my new role.

FSP News: What interested you about accepting the FSP coordinator position?

JM: I have always enjoyed the forest management side of the NCFS much more than the wildland fire side. I knew I wanted to focus my efforts within forest management and serve at a higher capacity throughout North Carolina. Becoming a program coordinator would allow me to follow my forest management career goals while also being able to serve more people throughout the state. I really enjoy helping and educating others, and this position has allowed me to do both.

FSP News: What do you see the N.C. Forest Stewardship program working on in the coming 2-3 years?

JM: I would like to see the NCFS and private sector natural resource professionals work together to grow the N.C. Forest Stewardship program. I want to be present and helpful to NCFS county/district staff and natural resource professionals outside the NCFS, and I encourage you all to contact me. I want our service foresters and other plan writers to understand that stewardship plans are not as intimidating as they may seem. I often thought this when I was a service forester, but after really diving into this program, it is much simpler than it seems on the surface. If you make a site visit where the landowner is already eligible for stewardship certification, speak up and say something. Turn that present use value/forest management plan into a forest stewardship plan.

As the forest stewardship coordinator, I want to focus on educating our staff and other natural resource professionals about the value and benefits of the Forest Stewardship program so they feel confident when discussing the Forest Stewardship program with the landowners they serve. I want landowners to receive quality comprehensive stewardship plans that provide each landowner with the information they need to accomplish their management goals for their woodlands. I also want to see those hardworking and dedicated landowners who carry out their stewardship recommendations and reach their goals to be recognized as Outstanding Woodland Stewards and become certified as a Stewardship Forest.

FSP News: What is your stewardship philosophy when talking or working with woodland owners in North Carolina?

JM: Always have an open mind and introduce landowners to new ideas and opportunities for their woodlands. Most of the time when talking with landowners about their woodlands, they have one main topic or idea they want to discuss, implement or learn more about. If we just take a little more time to discuss other resources, each landowner will receive better resource management advice. Better advice and more education mean better total resource management. We all benefit from better natural resource management. In other words, meet the landowner's needs, but do not be afraid to exceed their expectations.

FSP News: How can landowners or other agency personnel contact you?

JM: Feel free to contact me with questions or comments at:

Email: Jonathan.murray@ncagr.gov

Office Phone: 919-857-4833

Webpage: https://www.ncforestservice.gov/fsandfl/are_you_stewardship_material.htm



ForestHer NC

By Jennifer Roach, NCFS Hillsborough district forester

ForestHer NC Continues On Virtually

Over the last year, we all found ourselves rising to new challenges that none of us could have imagined. As with everyone else, ForestHer NC had to learn to communicate differently in order to continue providing educational programs to women landowners and women natural resource professionals.

In February 2020, ForestHer was busy preparing for our March 2020, one-day workshops about managing for wildlife. We started receiving calls from many participants who were unsure if they should attend and if we could offer refunds. We quickly found ourselves canceling our meetings, finding a way to refund all registration fees, while still honoring those financial commitments that we had made. We felt a little defeated, disappointed and unsure of how to move forward from there.

Our committees continued to meet and discuss options for after the pandemic but quickly realized we needed to find ways to connect with women during the pandemic. Our workshop committee learned more about options for hosting virtual meetings and decided to break the March one-day workshop into four virtual meetings that would span across a four-month period.

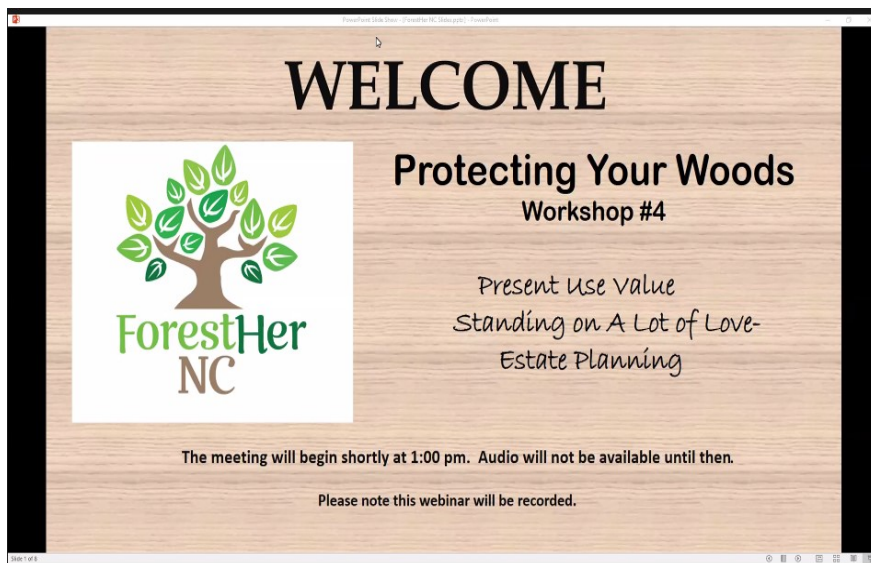
Meetings would be 1.5 hours long with the opportunity for participants to continue asking questions of our panel

or sharing their stories for another 30 minutes after the meetings. We were nervous we may only have a few participants and were concerned with the limited interaction that occurs in most virtual meetings.

But, what we found was something entirely different. We found our first webinar series an absolute success! Participants spoke of their excitement to continue connecting and learning. They provided positive feedback that allowed us to make improvements to each meeting and gave us the momentum to keep moving forward.

What we learned is ForestHer could reach even more women across North Carolina by adapting the delivery method. Women who had not been able to attend a daylong workshop or had never heard of ForestHer were finding the virtual meetings more convenient. In addition, all of the virtual webinars have been recorded and can be found on the [ForestHer NC YouTube Channel](https://www.youtube.com/channel/UCcK3U1sKtD-4BBrWeKWHdhw/videos) at <https://www.youtube.com/channel/UCcK3U1sKtD-4BBrWeKWHdhw/videos>.

This format has provided further opportunities to reach an even larger audience as well as to give participants the option of going back and reviewing the information as needed. Since the launch of our first webinar series September 10, 2020, we have been fortunate to be able to offer three different meeting series totaling nine virtual meetings with an average of 133 participants in each meeting.



ForestHer NC continued

Though we yearn for the days we can gather together again, we are very grateful for the opportunity to provide virtual learning programs. As we continue to plan for future virtual meetings and the potential for in-person workshops or field days, our successes over the last year continue to remind us of the journey we are on.

ForestHer continues to find ways to reach a more diverse group of women particularly in areas lacking high speed or quality internet service or those who prefer face to face interaction. With the support of our partnering agencies and natural resource firms, we are excited about future opportunities to support, educate and empower a community of women landowners and natural resource professionals engaging in forest conservation and stewardship in North Carolina.

ForestHer NC is managed by an executive board and works through multiple committees to produce educational opportunities. ForestHer NC is always looking for help to support our mission. Whether you are a natural resource professional or just looking to become more involved, we are always looking for volunteers willing to assist with website maintenance, social media updates, financial sustainability and grant management, planning workshops, evaluating the impact of our work across North Carolina, or ensuring that our programs are inclusive and inviting to a diverse group of women and other gender minorities.

Did you know that 28% of women own family forests (10+ acres) in North Carolina? They own roughly 1.89 million of the 9.485 million total acres of family forests. Of the total ownership, 38% are owned jointly with a spouse, and approximately 10% are held within a family LLC or LLP. Women are taking a more active role in learning about their woodlands and seeking education about the many long-term values and benefits woodlands provide while understanding future strategies for leaving a legacy.

Landowner Resources:

For more information or questions about this growing organization, contact ForestHer NC at foresthernc@gmail.com, or join our Facebook group and follow us on Instagram.

⇒ [ForestHer NC -- Home | Facebook](#)

⇒ [ForestHer NC \(@foresthernc\) • Instagram photos and videos](#)

BY THE NUMBERS North Carolina's Family Forest Ownerships

9,485,000 ACRES

179,000 OWNERSHIPS

354,000 OWNERS

MEAN SIZE

53 acres

Median = 20 acres



TOP 5 REASONS FOR OWNING

Beauty or scenery

Wildlife habitat

Privacy

Nature protection

Water protection



Outstanding Woodland Stewards (OWLS)

Outstanding Woodland Stewards

July 2020 – June 2021

Sidney Bruton, III	Johnston County	Coastal Plain Region
EastWest Organics, LLC	Orange County	Coastal Plain Region
Hughes Park	Davidson County	Coastal Plain Region
Kenny Ray	Caswell County	Coastal Plain Region
Carlton & Jennifer Murrey	Henderson County	Mountain Region
Tar Heel Mountain Timber Farm	Wilkes/Ashe County	Mountain Region
There There, LLC	Ashe County	Mountain Region
Young Family	Caldwell County	Mountain Region
C, E, & G Woodland Sanctuary	Ashe County	Mountain Region
One for His Glory, LLC	Caldwell County	Mountain Region
Robinson Family	Caldwell County	Mountain Region
Gentry Farms	Ashe County	Mountain Region

Upcoming Events:

- **SFE Webinar: Potential Impacts of Prescribed Fire Smoke on Air Quality, Public Health, and Socially Vulnerable Populations in the Southeastern U.S.** *Aug. 12 at 1 p.m.*
 ◇ https://ufl.zoom.us/webinar/register/WN_QdpGYxvNR0WEtiJGtJGpCQ
- **Sustainable Forestry Land Retention Project Webinar — Cost Share Programs: Preparing Landowners to Make Application** *Aug. 25 at 10 a.m.*
 ◇ https://ncsu.zoom.us/webinar/register/WN_HXzf9B4vTM-VRuk8y5Ns-A
- **2021 NCFA Annual Meeting Greensboro, NC** *Sept. 29-Oct. 1*
 ◇ <https://www.ncforestry.org/events/2021-ncfa-annual-meeting>

From all of us at the N.C. Forest Service, we wish you and your families a safe and enjoyable summer!