

a. **Title:** Family, Forests, Future: Engaging and Educating New and Beginning Forest Landowners

b. **Abstract:** Forestry education programs, such as Master Tree Farmer, are frequently offered by Clemson University Cooperative Extension, but many of these are designed for landowners with previous forestry knowledge. The “Family, Forests, Future” program was developed to connect new and beginning forest landowners to a network of forestry professionals across the state and provide a baseline of forest health and management information. The hybrid design of self-paced online content and optional in-person forest management and forest products tours intentionally attracted those previously unengaged in traditional forestry education programs. The virtual platform allowed participants to access program content with flexibility in learning time, eliminating travel costs. It also allowed participants to communicate with experts and build community through a peer-learning opportunity. Distance learning was also ideal for forest landowners in rural locations who may have had limited access to other Extension programming. The optional in-person tours offered experiences that encouraged active participation and first-hand learning opportunities to view practices the online content introduced.

Enrolled participants ranged from 30 to over 70 years of age and were equally divided among male and female participants. One-third were minority landowners, a group often unengaged in extension programming. A pre-and post-course survey reflected a knowledge increase among participants on all the program’s topics. Three-fourths of the participants also indicated they enrolled in the program to learn more about forest management practices and find resources to help them manage their property. A majority also responded that online courses were a preferred method to receive educational information and materials related to forest management. The ability of forest owners to make informed, scientific-based management decisions on their land shapes the health and productivity of their forests, thus contributing to the sustainability of working forests nationwide.

c. **Narrative for Entry:** The new and beginning forest landowner category contains several distinctive groups. One of these groups is first-time landowners who purchase forested property. The 2018 National Woodland Owner Survey (NWOS) reported that over 15% of the family forest landowners in the US who own more than 10 acres acquired their property within the last ten years. New forest landowners have been reported to be well-educated and financially secure, frequently are either retired or young professionals, and do not come from a rural background. Those purchasing forestland may seek a healthier, safer, simpler lifestyle while connecting with nature and having increased recreational opportunities. Many feel they are environmentally aware, have a preservationist attitude towards nature, and mistrust forestry professionals. These attitudes can lead to their forestland being unmanaged since they assume that nature should take its course, and they will not seek professional management advice. When implemented, management often enhances the passive benefits of land ownership, such as aesthetics, recreation, and land protection. Research has indicated that appropriately messaged recommendations made to these landowners can result in a shift in management to consider including commercial forestry operations on their property.

Another group of new landowners will be those inheriting property. A lack of prior involvement in managing family forest land has created a generation in line to inherit

timberland that may have little interest in becoming more involved in forest management, are often absentee landowners, and may feel little attachment to the land. Lack of involvement or interest in the family forest can make those inheriting land more inclined to consider selling the land. Land sales increase the risk of forest fragmentation or conversion to other land uses, while mismanagement by uneducated first-time landowners can reduce forest health and productivity.

A subset of new forest landowners inheriting property are women. Female spouses of forest landowners can become primary owners late in life since women commonly outlive men, and daughters can inherit from fathers without previous engagement in property management. Female forest landowners are increasing in numbers as primary owners and decision-makers. Their numbers have increased from 11% in 2006 to 22% in 2013 nationwide and from 14.5% in 2006 to 27.1% in 2018 across the south. Female forest landowners are less likely than male landowners to be involved in the forestry education programs and outreach that are traditionally the most common means for getting information and training to landowners since most of these programs are male-dominated, and many women are uncomfortable participating.

An additional subset of the category of new forest landowners inheriting property are minority landowners. Timber harvesting is often used as a necessary source of periodic income for African American forest owners. Ownership of smaller tracts than non-minority landowners can be challenging for implementing practices such as timber sales and other management. Also, studies have reported a lack of knowledge of forestry management practices among almost 40% of African American forest landowners. Creating generational wealth through improved management of minority-owned forestlands has not previously been a focus of outreach and education programs.

The hybrid education program we created for new and beginning forest landowners and managers had two components: self-paced online content and optional in-person forest management and forest products tours. The online content was developed in five modules: Introduction to Forestry and Landowner Assistance in South Carolina; Timber Products and Economics; Prescribed Fire; Forest Health; and Developing a Forest Management Plan. We offered a forest management tour in November 2023 at Harbison State Forest in Columbia, SC. Two forest products tours visited active logging jobs and Canfor Southern Pine in Camden, SC and West Fraser OSB in Joanna, SC in April 2024.

The Family, Forests, Future program design was unique; it pulled collaborators from across the state to share their expertise on the curriculum topics. Extension agents and specialists were joined by representatives from the SC Forestry Commission, including State Forester Scott Phillips; Forestry Association of SC President Cam Crawford; former SC Tree Farmer of the Year Mike Meetze; consulting forester Mike Wetzels; and Audubon SC Director of Land Conservation, Tim Evans. Another critical component of the program was a shift away from narrated PowerPoint presentations when possible, creating videos that highlighted the program topic in the field with the invited collaborators and extension personnel. The videos allowed the contributors to focus more engagingly on their content and connect with the audience. We also included a discussion board, which the course creators moderated. The discussion board allowed the course participants to engage with each other, ask questions related to the course content, and request additional resources.

Pre- and post-course surveys were included to measure participant knowledge using a 5-point Likert scale (Table 1). Participants reported knowledge gained across all topics upon completion of the course. By expanding knowledge on these topics, participants will hopefully be encouraged to seek additional education opportunities and consider the impact their management decisions will have on the health and productivity of their forestland.

Table 1. Change in Participant Knowledge from Pre-Course to Post-Course Survey (percent respondents) based on a 5-point Likert scale (1 (no knowledge), 2 (little knowledge), 3 (neutral), 4 (somewhat comfortable working knowledge), and 5 (comfortable working knowledge)).

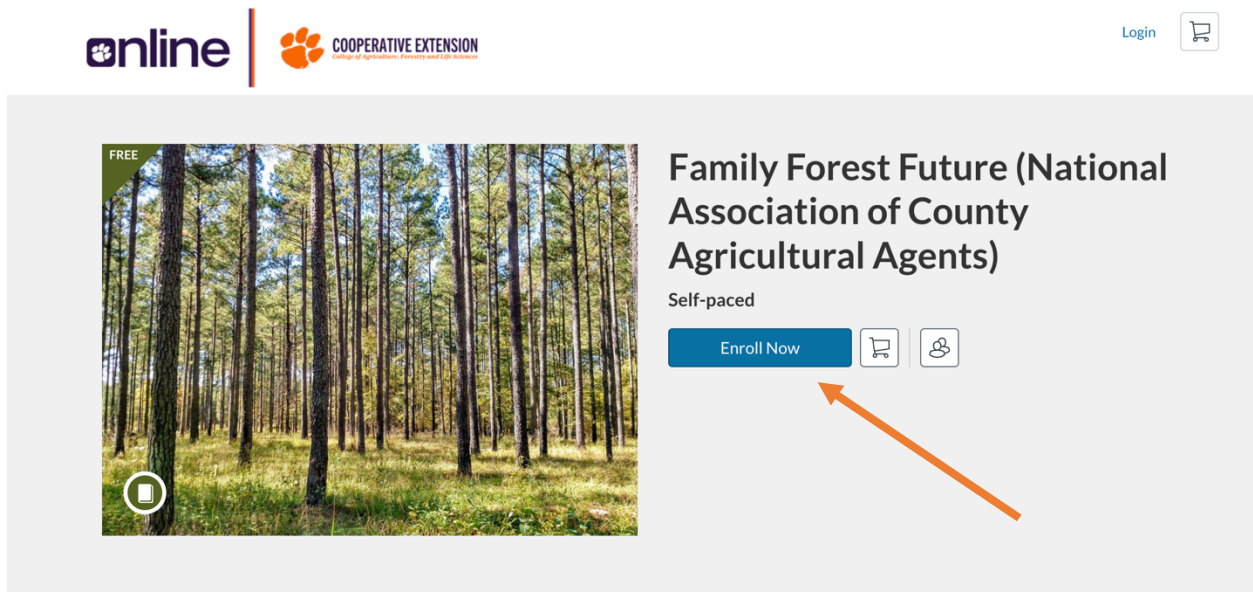
Knowledge Rating	Landowner Assistance		Timber Products & Economics						Prescribed Fire		Forest Health		Forest Mgt Plans	
			Timber Products		Harvesting & Merchandising		Silviculture & Forest Mgt							
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1	40	9	20	0	32	9	52	0	36	9	28	9	20	0
2	28	9	36	27	40	27	28	36	20	9	40	9	40	9
3	28	36	40	27	24	9	4	9	28	27	20	27	24	18
4	4	27	0	0	4	36	12	45	12	36	8	36	12	45
5	0	18	4	45	0	18	4	9	4	18	4	18	4	27

The Family, Forests, Futures creators, Dr. Patrick Hiesl and Janet Steele (Clemson University), and Dr. Molly Darr (Washington State Extension), have submitted a grant to the USDA AFRI Foundational and Applied Sciences program that is under consideration to expand this program across the country. The goal is to develop applicable program content for South Carolina and highlight other regions of the nation and their common forest management practices and species diversity. The grant proposal seeks to survey experienced family forest owners nationwide to learn about the information they wish they had known early on as new and beginning forest owners.

JUDGING INFORMATION

A private registration link has been created for the judges evaluating the course. The selected judges will use the link below to enroll in the course and gain access to the course content. All requirements and prerequisites have been removed from the course to allow the judges to advance through the modules without restrictions.

Private registration link: <https://cpe.clemson.edu/browse/extension/forestry-wildliferesources/courses/family-forest-future-national-association-of-county-agricultural-agents>



The screenshot shows the top navigation bar with the 'online' logo, the 'COOPERATIVE EXTENSION' logo, a 'Login' link, and a shopping cart icon. The main content area features a large image of a forest with a 'FREE' badge in the top left corner. To the right of the image, the course title 'Family Forest Future (National Association of County Agricultural Agents)' is displayed, followed by 'Self-paced' and an 'Enroll Now' button. An orange arrow points to the 'Enroll Now' button. There are also icons for a shopping cart and a user profile next to the 'Enroll Now' button.

Course Description:

This program from Clemson Extension is designed for new and beginning forest owners. In this course, you will learn the basics of forest management and health. You will also become familiar with available landowner assistance programs, forestry professionals, and resources throughout the state. The online course includes instructional videos, knowledge check quizzes, and optional discussions. You will also have the opportunity to sign up for a forestry tour at the end of the course.

The judges must click “Enroll Now” to gain access after opening the link.