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Director's Note

When out in nature, I try to imagine what things looked like when the Chickasaw, Cherokee and others walked among the same trees. We are learning more about that every day, including that Tennessee's forests once resembled more of an open mosaic of grasslands and prairies maintained by Native Americans who used fire to clear space for hunting, traveling and growing crops. Shaping the landscape in this way disappeared—along with associated plants and animals—after European settlers set down roots. Today, fire plays a key role in bringing back the type of diverse landscape ideal for adapting to a changing climate.

See you outside,

Any Col

Terry Cook, State Director, The Nature Conservancy in Tennessee

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Rosebud Orchid (left); Controlled Burn at Chestnut Mountain (right) © Britt Townsend/TNC

Bringing Back Woodlands New in-house fire team advances restoration

It was a cool, spring morning not long after a controlled burn at The Nature Conservancy's Bridgestone Nature Reserve at Chestnut Mountain when someone noticed a pop of color emerging from the recently charred landscape. A rare rosebud orchid reached for the sun, likely after years or even decades of waiting under a dense forest canopy. It represented a promising sign after slow-and-steady efforts to mimic regular burns that historically opened the canopy so that sunlight could penetrate the forest floor.

"These planned burns help restore and maintain fire-adapted natural communities, like shortleaf pine and oak woodlands, which are important habitats for an array of native plant and wildlife species such as Northern bobwhite quail and pine warblers," says Chris Minor, TNC's fire manager in Tennessee and Kentucky.

Motivated by results evidenced by the orchid, TNC piloted its first Tennessee-based fire team this year. Throughout the spring, they prepared firebreaks—soil boundaries established to delineate between an area targeted for burning and surrounding forest and implemented controlled burns on more than 15,000 acres in the Cherokee National Forest, Daniel Boone National Forest and again at Chestnut Mountain.

"While the best opportunities to restore Tennessee forests and woodlands occur on public lands, state and federal fire programs do not typically have the personnel or financial capacity to meet the needs," adds Minor. "Launching our own independent fire program with centralized supplies, equipment and staff—leverages our collective efforts to work at a pace and scale required for restoring fire adapted systems in Tennessee and beyond."



Shelly Morris (left) and Britt Townsend (right) are all smiles during a controlled burn at Chestnut Mountain. © Trish Johnson/TNC

First Burn Anything but a typical day at the office by Britt Townsend

I refer to it as "that unicorn day." After an unusually cool and wet spring, we had the type of dry, sunny weather that is ideal for burning a landscape that naturally depends on occasional fire. This was good news with our spring burning window closing and members of our fire team soon departing for other seasonal work. It was "go time."

Full of enthusiasm, I arrived at our Bridgestone Nature Reserve at Chestnut Mountain, where I work as the conservation forester, wearing a helmet, my pack, fire-resistant clothing and newly minted Wildland Fire Certification. This being my first burn, I felt excited to see my name on the workplan as an "ignitor" charged with using a drip torch to deliver fire within boundaries carefully prepared around the 189-acre site perimeter. Since fire moves uphill while gaining intensity, we started at the top of the mountain and gradually moved down while other members of our team patrolled on foot and with an ATV to ensure that the burn was contained.

When it comes to this work, preparation is key. We don't just light a match and get to work. In addition to more than 40 hours of coursework, certification requires a physical test of your ability to walk three miles within 45 minutes while carrying a heavy pack. Fire lines are prepared months in advance, with shovels and rakes, to create clear soil boundaries between the burn unit and surrounding forest. Then we wait for "that day."

For me, this first burn was a day for the memory books. Based on our science and evidence on the landscape, we know that this mountain experienced regular fires before human settlement put them out. After that, intensive logging and mining led to a less diverse version of the original forest, one dominated by trees that cover what should be a more open mosaic of native plants, shrubs and grasses interspersed with trees like shortleaf pines. Like many throughout Tennessee, it is a forest that requires fire to restore itself. I look forward to playing a small role in making that happen.

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Frank Top, together with his wife and his brother visit controlled burn projects in Tennessee. © Courtesy of Frank Top

Spotlight on Support

"I didn't think a lot about this work when we first donated to The Nature Conservancy's new fire program. Then I witnessed TNC's work on-the-ground and learned about how long some seeds stay dormant in the soil until a fire clears the way for them to grow and thrive. These burns also reduce dead leaves and branches on the forest floor that can fuel a wildfire. So, with this tool, you can prevent catastrophic fire while benefiting nature." - Franklin Top, President of the Top Family Foundation



Promoting Good Fire

In an effort to create greater awareness around restoring the fire-adapted forests and woodlands that once dominated Tennessee's landscape, The Nature Conservancy is developing a Fire Learning Trail on the Cumberland Plateau. This includes crafting messages that will be featured at key locations along a well-traveled road on TNC's Bridgestone Nature Reserve at Chestnut Mountain.



2 Maryland Farms, Suite 150 Brentwood, TN 37027 615-383-9909

tennessee@tnc.org nature.org/Tennessee



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