



SAND & PINE

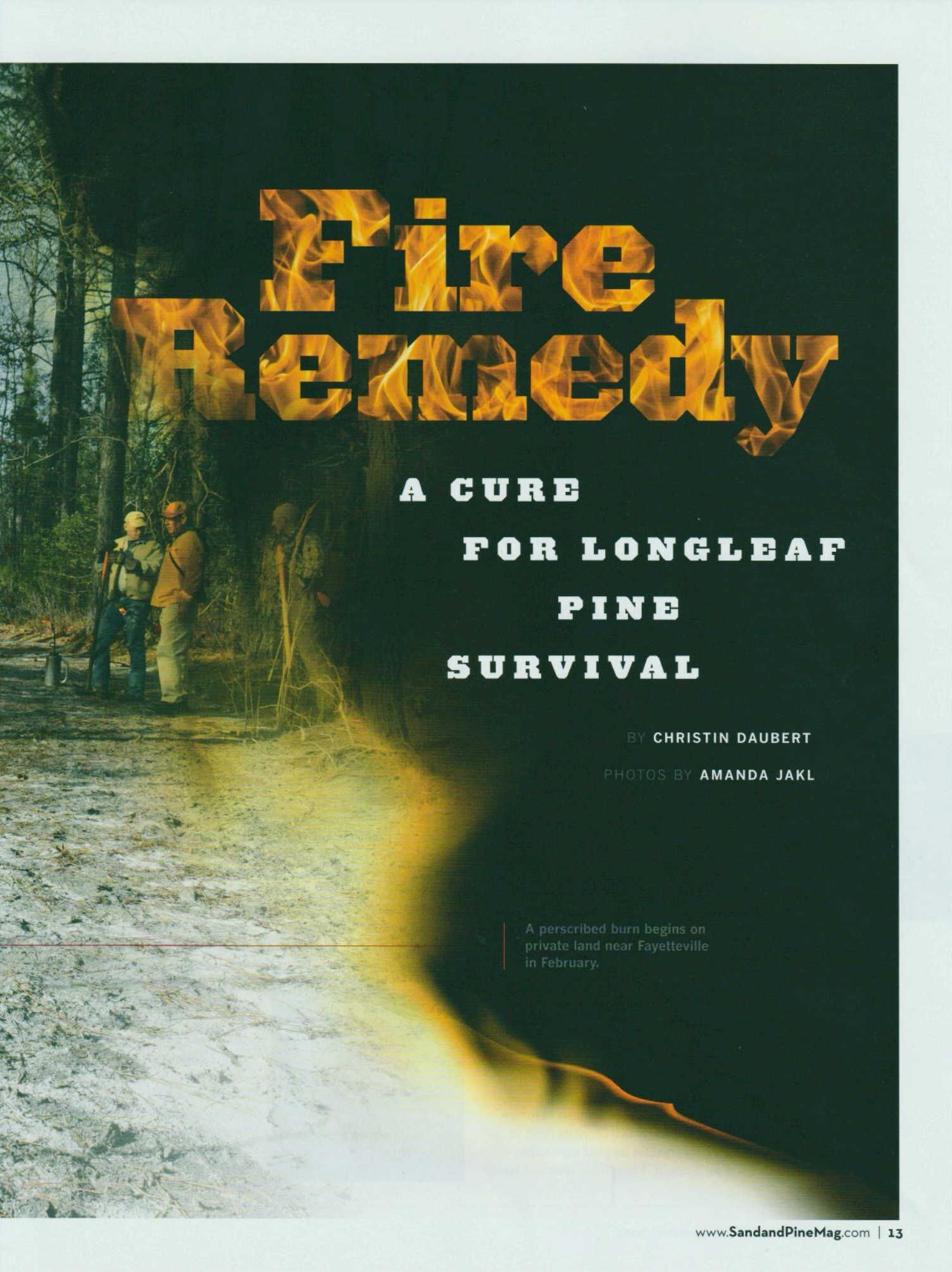
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MAGAZINE

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Fire Remedy

A CURE FOR LONGLEAF PINE SURVIVAL

BY CHRISTIN DAUBERT

PHOTOS BY AMANDA JAKL

A prescribed burn begins on private land near Fayetteville in February.



"It's about legacy," he says, as heads nod in agreement on a bright, blustery day. Jesse Wimberley is preparing a group of volunteers for a prescribed burn on 23 acres of private wooded land in Carthage. Of the dozen or so attendees for the day's burn, over half were in attendance for the first time. All eyes squinted in the sunlight to focus on Wimberley as he shared more about the importance of returning fire to the landscape.

Restoring and maintaining longleaf pine trees isn't an overnight task. To be done correctly, it requires education, certification, planning, patience and a healthy dose of passion. The conversations surrounding controlled burns, on this bright Saturday afternoon, had a strong theme: sustainability. "Many of us won't be around to see the maturation of these trees," says Wimberley. "We're working to create a legacy for future generations."

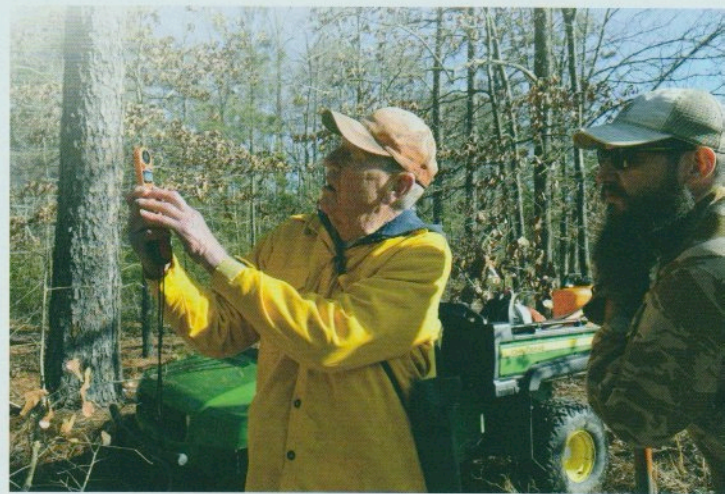
Wimberley is the coordinator of the Sandhills Prescribed Burn Association, an organization created "to assist private landowners in

the Sandhills counties with the restoration of Longleaf Pine ecosystems." He is also a fourth-generation burner and educator. The majority of prescribed burn associations are located out west as a facet of the ranching community, but the Sandhills Prescribed Burn Association is the first of its kind in the southeast—

"an experiment," says Wimberley—as no organized burn association in our region and landscape exists.

In case intentionally setting fire to the land sounds a bit hazardous and counterintuitive, a controlled or prescribed burn is set and monitored to reduce hazardous wildfires. The practice of conducting a controlled burn is intended to help forest management, and in the Midwest, farming. To safely and responsibly conduct these burns, The N.C. Forest Service provides both classroom and on-hand training to become a N.C. Certified Burner.

While longleaf pines aren't fireproof, they are resistant to fire, in part due to their deep root growth, which connects them to underground water sources. Fire is essential for longleaf maturation because it reduces competition for sunlight, which other trees and brush



impose. These fires prevent or slow the encroachment of dense brush and other trees. Controlled burns also result in a favorable seedbed by removing accumulated plant debris, exposing lush mineral soil. All of those factors are necessary for longleaf germination and rooting.

For the nonarborists among us, the longleaf pine has a storied history, not just in our community but during the colonization of our nation. The U.S. had approximately 90 million acres of longleaf pines throughout the southeast that were harvested for turpentine and construction over the past 300 years. There are roughly 3 million acres remaining, leaving the longleaf ecosystem one of the most endangered ecosystems in the world. Loblolly pine—also found readily in the Sandhills—were traditionally replanted after clearcutting. They are harvested for pulp—think 2x4s and toilet

paper. Because loblolly pines initially grow faster, they are preferred by the lumber industry. The longleaf, however, spend the majority of their youth growing a deep root structure. Both species of pines even out after 80 years or so, but early vertical growth of the loblolly makes it much more attractive to the lumber industry, threatening longleaf replenishment and restoration efforts, as the loblolly encroaches on longleaf forests.

A few more attendees join the group as Wimberley directs the conversation from conservation and restoration to safety and the burn plan. "Each prescribed burn is exactly that," shares Wimberley, "a prescription for the specific landscape and needs of the property." One size does not fit all when it comes to burns.

In anticipation of the day's burn, the land needs to be prepared, weather monitored (temperature, humidity and wind), a written plan and back-up plan prepared, and the proper authorities need to be notified as smoke will be in the area. There is considerable wind today, so Nick Ammons, a contractor and N.C.-certified burner is conducting and managing today's burn. Contract burners carry liability insurance and have the equipment and crew sufficient to carry out prescribed





Left: Property owner Charlie King sets his land alight, to improve understory health, reduce hardwood competition and support natural regeneration.



Left: Burn volunteers water down the bigger trees to ensure their safety before burning.

Water applied to the base of the tree protects it from the fire surrounding it.





burns on private land. While David Casey, the landowner, notifies the local fire department that a controlled burn is about to begin, Wimberley tells the group a little more about the landscape. He notes that 60 to 70 percent of endangered longleaf landscape is privately owned in the southeast, which differs greatly from the western part of the country. The Department of Defense is the largest owner of longleaf forests and “wants to share the

responsibility that comes with land used as a home for endangered species, with private landowners.” In order to reduce the overall liability of maintaining and tracking endangered species, the Department of Defense looks to educate the private sector. Wimberley receives funding from the Department of Defense to increase this collaboration.

One of the burn attendees is Kim Geddes, a local landowner working

toward her N.C. burner certification. Geddes owns 18 acres in Moore County, where a little over half is longleaf forest. She maintains the other half as a horse farm. When Geddes shares why becoming a certified burner appeals to her, her passion for conservation stands out. “Bringing the longleaf back will bring back habitat for an endangered species,” she says.

If you’ve lived in the Sandhills, you’ve most likely heard of the Red Cockaded Woodpecker (RCW). This little bird is not only an endangered species, but also a keystone species, meaning some 27 other species—both vertebrates and invertebrates—depend on the RCW for their survival. Geddes continues, “There’s a desire to create a flyway for the Red Cockaded Woodpecker to move them out from around Fort Bragg, where they are all together, and into Moore County.” The RCW congregates around Fort Bragg due to the installation’s healthy longleaf pine forests, which are regularly maintained through controlled burns as well.

A “flyway” is a flight path throughout the forest where longleaf pines thrive

along the way to provide more viable habitats for the RCW. Geddes is also working with U.S. Fish and Wildlife Services, who provides free resources to develop a plan and map out the best way to restore longleaf and eradicate competing growth.

While conservation may be at the forefront of Geddes’ desire to restore her longleaf and RCW population, safety and procedure are too. Creating a firebreak is an important part of every burn plan. A firebreak is a 4–6 foot plowed tract of fuel-free land between the designated burn area and any contiguous property. Not only is Geddes concerned with the RCW, a part of Geddes’ plan involves protecting her existing honeybee population. She will use honeybee-safe products once the burn is complete to kill the stumps of competing trees, such as scrub oaks, whose presence usually signifies poor soil quality.

“Once the burn is complete, we will go back in and seed with some [longleaf] trees. The ash from fire creates a lot of lime and naturally the soil is acidic so it starts balancing it out,” she explains.

A sense of community, and a strong respect for both the fire itself and the tradition of prescribed burning is palpable throughout the day. Watching the burn team direct and manage the fire captivates everyone as the fire dances across the land. “When fire is added to the landscape, it truly is magical,” says Wimberley.



Top: In the fall, Jesse Wimberley hosted a potluck for property owners and prescribed burn facilitators.



For more information about the Sandhills Prescribed Burn Association check out www.sandhillspba.org

Visit www.ncforestservice.gov to learn how to become a Certified North Carolina Burner.

Don’t miss the Party for the Pine at the Boyd Track of Weymouth Woods on April 18, with a prescribed burn and celebration of the oldest known longleaf pine tree.