

# **DEFINING RESILIENCE**

A lot has changed since The Nature Conservancy last reported on annual progress made towards conserving the lands and waters on which all life depends in Tennessee. To sum it up, we learned about resilience over the past year. And despite a global pandemic and economic downturn,

we are working harder than ever to employ science, promote policies, protect land and forge partnerships to advance conservation, even if we had to do it from offices within our own homes. Our mission has never been more important—for people and for nature—than it is today.

RESILIENT LANDS • RESILIENT WATERS • RESILIENT CITIES • RESILIENT FOOD SUPPLY
RESILIENT TO A CHANGING CLIMATE • RESILIENT PEOPLE

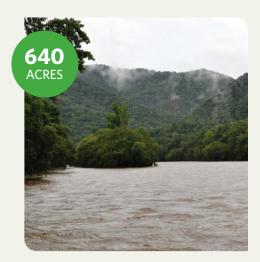




Safeguarding biologically diverse and resilient places is at the core of The Nature Conservancy's legacy.

#### 400,000 ACRES

We celebrated the conclusion of a project that marked the successful protection of 400,000 acres since TNC opened its doors in Tennessee.



The project—acquiring an approximately 640-acre in-holding within the Cherokee National Forest—allowed the U.S. Forest Service time to assemble Land and Water Conservation Fund dollars approved for permanently protecting what the agency had identified as its #1 priority in the state. This action safeguards mature forest habitat for black bear and rare bats, the historically significant Buffalo Rock formation, and more than a mile of frontage along the French Broad River in Cocke County. The U.S. Forest Service intends to manage the parcel as they do the surrounding forest, for species protection and a variety of recreational opportunities.

Learn more at nature.org/tnmilestones.



#### MORE LAND & WATER PROTECTION WINS



Protected summer foraging habitat for federally endangered Indiana bats in the Citico Creek watershed in Monroe County.



Protected native trout habitat, and secured an unprotected Cherokee National Forest in-holding, in the "High Country" where Tennessee, Virginia and North Carolina meet.



Conserving and expanding natural areas in cities benefits wildlife, reduces flooding, sequesters carbon, builds climate resiliency, and supports our physical and mental health.

### Parks With Purpose

Thanks to support from the Tynewald Foundation, Nissan and other generous donors, The Nature Conservancy began working with Metro Nashville Parks and Recreation to develop plans for restoring and conserving the city's parks for people and nature. This included using Geographic Information System mapping to identify conservation priorities within approximately 400 acres of Ravenwood Park located along the confluence of the Stones and Cumberland rivers, especially areas that might prove to be resilient in the face of a changing climate.

With assistance from Caroline Crews, a summer intern and rising senior at Sewanee, TNC installed 20 wildlife cameras to capture images for an inventory of species utilizing the park. Crews also helped with analyzing strategically placed bioacoustics recorders to confirm the presence of eastern red

bats, evening bats, tri-colored bats and even federally endangered gray bats.

"While exploring the woodlands and pastures of Ravenwood, I was amazed at the vast ecological diversity and gorgeous scenery that lie within the urban center of Nashville," says Crews. "I was exposed to something new and exciting each day, including monarch butterflies fluttering amongst their host plant milkweed, fawns splashing playfully in a pond, a rich environmental and human history, and some of the largest trees I've ever seen, all of which make this an especially unique and vibrant place."

The Conservancy also collaborated with the Southeastern Grasslands Initiative and Belmont University to identify opportunities for transforming former pastureland into native grasslands. The restoration work will be key to supporting



pollinators and other grassland dependent species whose populations numbers have undergone serious decline.



Promoting healthy soils helps with sequestering carbon and securing sustainable supplies of food and water that represent the cornerstones of life on earth.

# New Agriculture Leadership



The Nature Conservancy hired Zach Luttrell as director of agriculture to solidify TNC's commitment to conserving and promoting healthy soils in Tennessee and Kentucky. Zach comes to TNC with a wide array of experience, including a lifetime spent on his family farm in Mississippi.

Prior to joining TNC's staff, Zach served as principal consultant of Straightrow LLC, where he helped AgTech startups commercialize and scale operations. In

his new role, Zach is working to increase TNC's visibility in agriculture in Tennessee and Kentucky, including through strategies aimed at increasing the adoption of soil health practices by farmers in order to improve water quality and reduce erosion in the region. Zach is also building relationships with companies interested in providing a market for sustainable agriculture products.



**CLIMATE** 

Promoting clean energy and natural solutions to climate change transforms the narrative about these issues from perceived threats to opportunities.

## Climate Smart Forestry Fund

The Nature Conservancy and the University of Tennessee (UT) entered into a historic agreement establishing UT as the first academic institution to enroll in TNC's Working Woodlands program. As part of this effort to conserve approximately 11,400 acres of working forest managed by UT's Institute of Agriculture, the partners established a joint fund to support graduate and undergraduate students conducting research that advances knowledge about conserving forests and mitigating climate impacts.

"We understand that to address climate change, we must invest in science, promote natural solutions like sustainable forestry and train the next generation of leaders," says Britt Townsend, TNC's conservation forester in Tennessee. "This fund will help us move closer to that goal."

According to Townsend, areas of research might include investigating forest management practices that stimulate carbon sequestration, studying issues related to invasive species and delving into the socio-economic benefits of forest



ecosystem services. Requests for research projects will commence in 2021 as the program is funded.

Visit nature.org/tnpartnership to learn more about this project and other ways TNC is collaborating with partners to conserve Tennessee nature.

#### By the Numbers: Cumberland Plateau and Mountains

The Nature Conservancy conducted state-of-the-art modeling to map the ecological systems of the Cumberland Plateau and Mountains. This information can and will be used to prioritize restoring native woodlands and forests.

**23** LiDAR-generated terrain models used to generate a map of dominant forest communities.

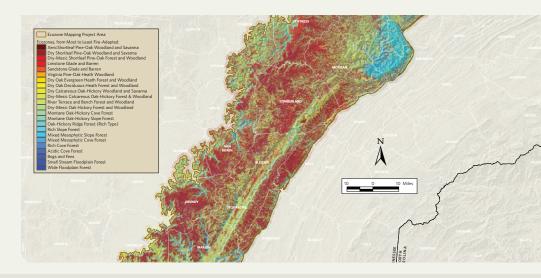
**3,977,320** Acres mapped to gain an understanding about fire-adapted habitats.

1% Unique and rare ecological systems such as sandstone and limestone glades and barrens, and bogs and fens.

**85%** Area dominated by fire-adapted ecological systems.

"This information demonstrates that the need to restore the Cumberland Plateau and Mountains is greater than in other places in the Southern Appalachian landscape. As land managers, we must respond by increasing our capacity to implement controlled burns or we will continue to lose these systems and the species that depend upon them"

-Katherine Medlock, East Tennessee program manager



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Thank you to each and every one of our members for your continued support of The Nature Conservancy in Tennessee. Your investment is critical to the impact of our conservation work, communications and operations. With your help, we are protecting Tennessee for people and nature.