WINTER 2018 Tennessee felduates

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MARKING 40 YEARS

TNC draws upon four decades of experience to address more complex issues at larger scales.

Last summer, The Nature Conservancy celebrated the largest land donation received since opening its doors in Tennessee 40 years ago. As owner of the 5,800-acre Chestnut Mountain property, donated by Bridgestone Americas, Inc., TNC is focusing on projects that promote carbon storage, sustainable forestry, water quality and outdoor recreation. Collectively, these actions (and more) will preserve the property while benefiting people who live, work and play in the region. "As we celebrate our 40th Anniversary in Tennessee, the Bridgestone Nature Reserve at Chestnut Mountain demonstrates our legacy of land protection while representing how we plan to address today's environmental challenges," says Terry Cook, TNC's state director in Tennessee. "We invite our members, supporters and partners to think big with us as we pursue strategies that benefit the lands, waters and people located in each of Tennessee's 95 counties."

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The Nature Conservancy's mission is to conserve the lands and waters on which all life depends.

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State Director's Chat



Thanks for your continued support as we mark 40 years of conserving nature in Tennessee. To say we couldn't do it without you is an understatement.

Upon reflecting on the impact of our work over the years—from those first acres protected to our most recent efforts at Chestnut Mountain—I can't help but feel excitement about the future of conservation in Tennessee. Our 40th Anniversary represents an opportunity to reflect on what we have learned and determine how to tackle environmental issues that are more significant and complex than ever before.

Time is of the essence. But we are up for the challenge.

As we embark on a new year it is important to recognize the true urgency of our work in a world that is projected to have more than nine billion people by 2050. Protecting nature—and providing water, food and energy to a growing population—are no longer mutually exclusive goals. In fact, addressing these together are paramount to sustaining life on Earth.

Can we design a future that meets people's basic needs without further degrading the planet? The answer is "yes," but will require collaborating across traditionally disconnected sectors within society, including public health, development and finance. Also, this work must occur at an unprecedented scale with little time to waste.

I look forward to sharing more with you about new partnerships and evolving ways of equally balancing the needs for food, water and energy with protecting nature. First, it begins organizing our work around the following four priorities:

- Protecting Land and Water
- Tackling Climate Change
- Providing Food and Water Sustainably
- Building Healthy Cities

In the following pages, and in the enclosed annual Impact Report, you will see that more and more, we are developing projects that consider the needs of people along with the needs of nature. Thanks to your support and involvement, we're making great strides. Truly, your contributions are the lifeblood of our work.

With best wishes for the holidays and the New Year.

See you outside,

Juny Col

Terry Cook, State Director



Over 40 years, The Nature Conservancy has cultivated skills that make it possible to pursue larger scale and more complex projects than ever before.

1979 LAND PROTECTION | Shady Valley Nature Preserves



TNC made its first land acquisition in Shady Valley with the purchase of Jenkins Cranberry Bog to protect Tennessee's only native cranberry population. Since then, TNC added Orchard Bog, the John R. Dickey Birch Branch Preserve, the Schoolyard Springs Preserve and the Quarry Bog Preserve to its Shady Valley portfolio.

1981 SCIENCE | Cave & Karst Program



Since purchasing a property with two caves, TNC has

pioneered the protection of Tennessee cave and karst habitats critical to the life cycles of endangered bats. More recently, TNC built the world's first artificial cave to help hibernating bats combat white-nose syndrome and collaborated with Bat Conservation International to co-fund promising research on treatments for the same disease.



1990 ENDANGERED SPECIES | Mount View Cedar Glade

TNC led the recovery of the endangered Tennessee coneflower since acquiring key cedar glade habitats beginning in the 1980s. In 1990, TNC purchased Mount View Cedar Glade, now managed as a State Natural Area, to protect the site of the iconic flower's discovery. In 2011, the U.S. Fish and Wildlife Service removed Tennessee coneflower from the federal Endangered Species List.

2003 GOVERNMENT RELATIONS | Anderson-Tully Project



TNC secured Forest Legacy funds to purchase 11,800 acres of bottomland hardwood forest and wetlands from the Anderson-Tully Corporation to create the John Tully Wildlife Management Area. This marked the first time TNC tapped into this federal program, which provides funding to protect environmentally important forestlands threatened by conversion to non-forest uses.

2005 PRIORITY SETTING | State Wildlife Action Plan (SWAP)

In 2005, and again in 2015, TNC and the Tennessee Wildlife Resources Agency (TWRA) co-authored SWAP, the state's comprehensive wildlife strategy. Using cutting-edge mapping software, SWAP identifies and evaluates habitat, threats and actions tied to species of greatest concern in order to guide conservation efforts that will prevent wildlife from declining to the point of endangerment.





2007 RESILIENCE | Connecting the Cumberlands

TNC teamed up with two timber companies and the State of Tennessee to complete the largest conservation transaction in state history since creating the Great Smoky Mountains National Park. The Connecting the Cumberlands deal protected 127,854 acres that links with 66,000 acres of additional public lands on the northern Cumberland Plateau, setting the stage for pursuing conservation at a larger scale.

2017 WATER | Roaring River Dam



Over the years, TNC has worked in 30 watersheds around the state. In 2017, this included joining forces with the TWRA, the Army Corps of Engineers, the Southeast Aquatic Resources Partnership, the U.S. Fish and Wildlife Service, and the Tennessee Department of Environment and Conservation to remove the Roaring River Dam—the largest dam ever removed in the state for river restoration purposes.

COVER View of the Great Smoky Mountains National Park at Dawn $\textcircled{}{}^{\odot}$ Paul Kingsbury

ABOVE Wild Cranberries © Gabby Lynch/The Nature Conservancy; Female Bat With a Transmitter © Cory Holliday/The Nature Conservancy; Tennessee Coneflower © Michael Hodge; John Tully State Forest © TN Department of Agriculture; Fence Lizard © Janet Haas; Savage Gulf in the Southern Cumberland Plateau © Stephen Alvarez; Roaring River Dam Removal © The Nature Conservancy

Partnership In Action

TNC and The Conservation Fund develop a successful formula for protecting land in Tennessee.



They jokingly call it the "Ralph and Gabby Show," a professional partnership that has evolved around land protection projects benefiting people and nature. For the past three years, The Nature Conservancy's director of protection, Gabby Lynch, has joined forces with her counterpart at The Conservation Fund, Ralph Knoll, to complete four real estate projects together.

One of their recent projects involved acquiring, protecting and transferring 616 acres into the Cherokee National Forest. The parcel includes the headwaters of Taylor Branch, a pristine tributary to the Conasauga River that is popular with outdoor adventurers, including local snorkelers.

"This property adds beauty and biological diversity to a landscape that harbors federally and state-listed species and serves as a popular nature destination," says Terry Cook, TNC's state director in Tennessee. "Protecting it illustrates how government agencies, private organizations and conservation-minded landowners can join forces to benefit wildlife and all Tennesseans."

TNC and the Fund jointly acquired the property from Shepherd L. Howell, the son, and other family members of Alonna and Dr. William Harvey Howell. Dr. Howell bought the land in the early 1980s to prevent uses inconsistent with his family's conservation ethic. They are pleased that it is now part of the national forest.

"Working together allows us to move on an opportunity more quickly than we or individual partners could," says Gabby Lynch. "Sharing equally in real estate transaction costs reduces our financial risk. It is a formula that works for our organizations, and for nature."

Another key to their success has been support from the federal Land and Water Conservation Fund (LWCF), which uses a percentage of proceeds from offshore oil and gas royalties—not taxpayer dollars—to acquire and protect critical lands for wildlife and recreation.



Over five decades, the LWCF has invested approximately \$280 million in protecting and expanding parks and forests throughout Tennessee.

"I'm excited to be working with Gabby on four new land conservation projects, on behalf of the Cherokee National Forest, that would protect important habitat and enhance public recreation access," says Ralph Knoll. "I'm confident this unique partnership will lead to more success with these new opportunities."

Support for this project came from the Tucker Foundation and the Open Space Institute, which assembled funding from the Doris Duke Charitable Foundation, the Lyndhurst Foundation, the Benwood Foundation and Merck Family Fund due to the tract's importance in facilitating wildlife adaptation to climate change.

ABOVE Gabby Lynch and Ralph Knoll © *The Nature Conservancy*; RIGHT Conasauga River Near the Howell Tract © *Claire Cooney*

SOUTH ZONE COLLABORATIVE

TNC builds consensus needed to advance restoration in the Cherokee National Forest.

Acting as northern and southern bookends to the Great Smoky Mountains National Park, the Cherokee National Forest (CNF) connects a patchwork of public lands that collectively provides resilience in the face of a changing climate. It is the reason behind why The Nature Conservancy assisted the United States Forest Service (USFS) with seeking consensus, among diverse stakeholders, around recommendations for restoration work in the CNF's south zone.

The conversation focused on white pine. While part of the local ecology, white pine has come to dominate portions of the landscape. A prolific seeder, it chokes out other species key to a balanced ecosystem. The USFS sought recommendations from the stakeholder group, known as the South Zone Collaborative, on whether and how landscape restoration should take place.

"The USFS is required to thoroughly explore public opinion before implementing new practices in a national forest," says Katherine Medlock, TNC's program director in east Tennessee. "TNC can navigate this process more rapidly so that the agency can move forward with implementing outcomes."

Typically, the USFS conducts environmental assessments for 3,000 to 4,000 acres of forest. In this case, the Collaborative examined the entire southern portion of the CNF, approximately 300,000 acres. Of that, the stakeholders identified an area encompassing an unprecedented 60,000 acres in need of restoration.

"This is the first time we used this process to address forest restoration at

this scale, and so it serves as a blueprint for how we might proceed in the future," says Michael Wright, USFS District Ranger for the CNF. "It would not have been possible without TNC. They work

South Zone Collaborative

Cherokee Forest Voices Freichs Lumber Mountain True National Wild Turkey Federation Panther Creek Forestry Southern Environmental Law Center Tennessee Division of Forestry Tennessee Forestry Association Tennessee Heartwood Tennessee Sierra Club Tennessee Wildlife Resources Agency The Nature Conservancy The Wilderness Society University of Tennessee US Fish and Wildlife Service United States Forest Service

with all kinds of interest groups and command a high level of respect among the stakeholders."

According to Medlock, most people agree that restoring ecological balance to the national forest represents a positive outcome. However determining how to achieve that can be tricky. TNC engaged a facilitator, Rob Sutter with Enduring Conservation Outcomes, to guide the Collaborative through a process that included learning about the south zone's ecosystem, witnessing examples of current and desired conditions, and considering strategies such as prescribed fire, sustainable forestry and planting diverse forest species.

"Today we celebrate thoughtful discourse and collaboration among people who care about the national forest," adds Medlock. "Restoring the landscape to its ecological potential not only benefits wildlife habitat and native diversity. It also supports local livelihoods through the sustainable production of valuable, locally-sourced wood products."



PASSING THE TORCH

A changing of the guard secures the McQueen family's legacy of caring for nature in Shady Valley.

Last summer, after 20 years, Charles McQueen retired as The Nature Conservancy's Shady Valley preserves manager. Filling his shoes is his son, Kenneth, who trained for the job as assistant preserves manager during his father's tenure.

IN HIS BLOOD I was born and raised in Shady Valley. We farm here. We run a business here. Our granddaughter, Olivia, represents the 8th generation of McQueens to live in Shady Valley.

HOME SWEET HOME Shady Valley is surrounded by the Cherokee National Forest. The road coming in here is curvy and sometimes treacherous. The seclusion and limited access has hindered development and promoted



conservation program continues to operate at its very best for the plants, animals and the habitats located at our preservesand for the enjoyment of visitors."

preservation. The human touch has not messed things up here.

MANY HATS Since retiring from teaching agriculture education for 30 years, I tend to my farm, co-operate our family's farm equipment business and teach classes at the Tennessee Fire Academy. Caring for the land, and teaching others to care for it, is always a priority because this is home.

HISTORY LESSON Many years ago, our family worked on crews responsible for draining wetlands to make room for tobacco farming, a common practice in the 1950s and 1960s. Now we have come full circle, with our family dedicated to restoring the landscape to what nature intended.

FORWARD THINKING I expect to spend more time on pursuing and managing easements-with government agencies and with private landowners-to protect Shady Valley's lands and waters. Due to my teaching background, I also hope to develop maps and signage and other opportunities for people to explore and study Shady Valley.

Outgoing Trustees

TNC recognizes the service of those who have dedicated time and talents to our mission.

The Nature Conservancy's Tennessee staff extends sincere thanks and best wishes to outgoing trustees: Tara Armistead, Edgar Faust and Sharon Pryse.

"Edgar has served two terms on our Board of Trustees, including as chairman," says state director Terry Cook. "His background in forestry management, affiliation with the Great Smoky Mountains Conservation Association and dedication to Tennessee nature has proven invaluable for advancing our mission around the state."

According to Cook, Sharon Pryse's love of all things conservation, and her deep roots in Knoxville and the eastern part of the state, will be missed as she completes her tenure with TNC.



He adds, "And Tara's background in landscape design and architecture have been invaluable as TNC extends its reach into urban areas like Nashville. All three are true conservation champions who we will continue to engage in conserving Tennessee's natural heritage for many years to come."



GROUNDED IN SCIENCE

Tracking bats in Tennessee takes an exciting new turn... towards the sky.

A recent post by The Nature Conservancy's *Cool Green Science* blog highlighted exciting advances made in learning more about the life cycle of endangered gray bats.

"Tennessee has more gray bats—and more roosts and caves—than any other state. But what they do as soon as they leave the cave, it's anybody's guess," says Cory Holliday, TNC's cave program director in Tennessee. "With the potential for new wind energy projects and other development in the region, there's a tremendous need to know what they're doing on the landscape."

Using ground- and air-based radio telemetry, TNC scientists, with help from Tennessee's Wildlife Resources Agency and Copperhead Consulting, mapped patterns related to how gray bats use the landscape when they are out flying and foraging. The biggest takeaway? Textbooks say that gray bats forage exclusively over water. This study revealed that this occurs only 50 percent of the time.



READ MORE in Cool Green Science at **nature.org/cgsTNbats**.

Calling Future Birders

In honor of their Founder's 70th birthday, the folks at Thayer Birding Software would like one million kids—from pre-K through high school—to download the new version 7.7, for free, in order to generate excitement about nature and conservation. Visit www.ThayerBirding.com, select the Windows or the Mac download, and enter "TNCYoungBirder." The



software features more than 1,000 birds commonly seen in the continental U.S. and Canada. It also includes 6,586 color photos, 1,506 songs and calls, 552 video clips of birds in action, 700 quizzes, an identification wizard, The Birder's Handbook and much, much more.

USE YOUR OUTSIDE VOICE

SHOW YOUR SUPPORT FOR THE FARM BILL AND LAND AND WATER CONSERVATION FUND.

Two of the United States' most important conservation tools now face uncertain futures after the Farm Bill and the Land and Water Conservation Fund (LWCF) expired on September 30. The Farm Bill represents the most important legislation for conserving private lands in the United States, providing farmers, foresters and ranchers with tools to protect their lands and their way of life. In addition, over half a century, the LWCF has invested billions of dollars into protecting lands and waters in every county and state at no cost to taxpayers.

However, there is hope. Some lawmakers wish to pass both LWCF and Farm Bill reauthorizations. As a result, it is not too late to contact your Senator and U.S. Representative—by email, phone or even tagging them in social media—about the important role conservation plays in your community.

Please consider using your "outside voice" to be vocal about the need to reauthorize and fully fund the Farm Bill and LWCF. Thank you for your commitment to The Nature Conservancy and the policy goals that are essential for achieving our mission.



CONTACT YOUR LEGISLATORS today at nature.org/actioncenter.



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Support The Nature Conservancy during this season of giving.

Please consider making an annual gift, or giving the gift of an annual membership, to support our conservation programs. Your investment makes it possible to protect Tennessee's ecological diversity and natural areas for wildlife and people.

There are a number of convenient ways to give.

Use the enclosed envelope.

Make a secure online donation at www.nature.org/tngiving. (Designate your gift to Tennessee in the memo line.)

Visit nature.org/membership to give a gift membership with just a couple of clicks.

Inquire about bequests, estate planning or gifts of stock by calling 615-383-9909. (Key dates for 2018 gifts: electronic stock transfers/December 27; mutual funds/December 11.)

Every tax-deductible gift makes a difference in our ability to advance The Nature Conservancy's mission to conserve the lands and waters on which all life depends. *Thank you!*