

# Confluence

Spring 2021



# Welcome

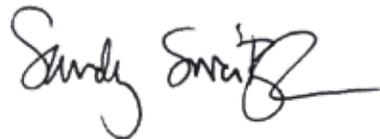
It wasn't your imagination: we really did just have the coldest and wettest winter in years! It also felt like the darkest and longest on record, too.

As much as I enjoy winter in the woods ("naked trees," long views! no ticks!), this year more than ever, I've been enjoying the green and flowering signs of life as they emerge, a reminder that Spring is around the corner. I hope you have been able to enjoy our trails catching these subtle signs of renewal too.

Spring reminds me that change is the only constant – one change you might have noticed is that we have recently hired several new staff. Although I miss the people who left, each new staff person brings new energy, ideas, perspective, and expertise that makes our organization stronger.

Speaking of new people, I want to personally welcome each of the more than 500 new TLC members who joined in the past year. I can't wait to meet you to say thank you in person as COVID restrictions wind down.

I hope you enjoy this issue of our Confluence newsletter, which highlights TLC's farmland protection work – using conservation tools to protect farmland is something we've done for years. Although majority of the farms we have protected aren't open to the public like our nature preserves are, they do provide many of us vegetables, flowers, milk, ice cream, cheese, pasture raised meat, and so many other products that sustain us and make the triangle a healthier and more vibrant region.



Sandy Sweitzer / Executive Director



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## **Our Vision**

*We see the Triangle region as an increasingly healthy and vibrant place to live where wild and working lands are protected and everyone has access to open space, clean water, and local food.*

*Photo by Don Kinney*



# Forever Farmland

By Margaret Sands

Since our founding in 1983, TLC has protected more than 4,000 acres of farmland across the Triangle. Well-managed farms and associated woodlands enhance our communities by producing food and other crops, safeguarding water, and sustaining local economies.

North Carolina is one of the top agricultural states in the nation, with food, fiber, and forestry forming the largest sector of the state's economy, and 8 million acres of land used for growth and production. But according to a recent study from American Farmland Trust (AFT), the state is losing farmland at a rate of 133 acres a day.

Between 2001 and 2016 more than 731,600 acres of agricultural land were  
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developed or compromised, making North Carolina farmland the second most threatened in the nation.[1] In addition, there are five times as many farmers over the age of 65 as under 35 on the 46,000 farms that remain in North Carolina,

In the past year, Triangle Land Conservancy protected almost 550 acres of farmland in our region. From pasture raised meat to local tomatoes and flowers for your table, these easements are supporting local food production and helping boost local food economies. Our farmland protection work builds on long-term farm community development, county farmland preservation planning, and strategies identified in the Triangle Farm to Food: Strategy + Action Plan.

In 2016, TLC collaborated with a number of regional partners to produce

[1] American Farmland Trust Farms Under Threat: State of the States Report

this comprehensive approach to protect agricultural land, and particularly farmland that can supply local food to people in the Triangle. Using GIS data, stakeholder engagement, and existing policy review, we identified six strategies to ensure permanent protection of farmland.

These strategies are: Leadership and Coordination, Land Use Policy and Protection, Valuing Farmers and Farmland, Farmer Education and Assistance, Local Food Economy, and Funding and Financing. Articulation of these strategies in the plan has helped guide Triangle Land Conservancy's efforts since 2017.

Permanent agricultural conservation easements are one way AFT and the Triangle Farm to Food Plan recommend for states to secure the future of farmland. A permanent conservation easement is a legal instrument that conveys certain rights from a willing landowner to a third party (such as TLC). The landowner retains ownership and other rights to their property.

At its core, a conservation easement restricts the right of the landowner to subdivide and develop the property while allowing them to continue to use the property for agricultural purposes. This is an especially useful tool for farmland as farmers often have no interest in developing their property but require the ability to farm their land to make a living.

While thousands of acres around the state were converted from working lands to low density residential or urban uses in the last year, TLC worked with many farmers to protect their land this past year, three of whom are featured here.

**Hoof Fin Hen Farm** in Chatham County is part of the historic Silk Hope farming community prioritized in the Chatham County Working Lands initiative. The 34-acre farm, owned by Eddie and Joan Culberson, is a working cattle, goat, fish, and chicken farm. Eddie and Joan live on the farm and maintain the beautiful property that also models best practices in both livestock and pasture management.

TLC worked with the Culberson family to purchase a conservation easement which restricts the use of the property to prevent subdivision, development, and other uses that would harm the conservation values. The purchase was funded in part by the NC Agricultural Development and Farmland Preservation Trust Fund, which funds protection of family farms, as well as the USDA Agricultural Lands Easement Program, which protects agricultural uses and conservation values, and a donation of land value by the landowner.

At the end of the project Eddie Culberson said, "Our decision to protect the family farm was based on the common thread of other participants, which is the sentimental attachment to the land. Being the 6th generation family owner, it was a no-brainer doing what our ancestors would have done if this program were available at that time. Sometimes being good stewards of the land means going beyond the daily blood, sweat and tears of working the farm; it means taking a stand for what you believe in."

**Down 2 Earth Farm** in Orange County is an organic certified farm and forestry operation in the Upper Neuse watershed. The water that gathers in the streams and ponds here eventually becomes drinking water for the cities of Durham and Raleigh.

"Being the 6th generation family owner, it was a no-brainer doing what our ancestors would have done if this program were available at that time.

Sometimes being good stewards of the land means going beyond the daily blood, sweat and tears of working the farm; it means taking a stand for what you believe in."

- Eddie Culberson,  
owner of Hoof Fin  
Hen Farm



Farm owner Cecilia Redding looked for a property for a long time before she found the one where she could grow her vision of “preserving land by growing food with a positive impact on the environment.”

Last year, Redding decided to donate a conservation easement on 142 acres of her farm. “My goal was always to figure out how to preserve the land once I found it. I could only imagine keeping it in farming after spending so much time on it. I feel it is a magical place.” The cities of Durham and Raleigh’s watershed programs both contributed funds to pay for the transaction costs, including the survey, attorney services, and staff time. The farm is currently leased to Split Acre Farm who have farm and flower shares available and sell at both the Chapel Hill and Carrboro Farmers Markets.

**Harland’s Creek Farm** near Pittsboro is not just an 176 acre organic farm, but also has a farmstead listed on the National Historic Register and a rare forest recognized by the North Carolina Natural Heritage Program. Judy Lessler has lived on and cared for the property since the 1970s and wanted permanent conservation of the property to be part of her legacy.

She worked with Triangle Land Conservancy staff to write a conservation easement that would protect the unique features of the property, but allow continued farming and adoption of innovative strategies to combat climate change. Despite the remarkable conservation values on the property, funding sources are lacking in this part of the region so a private donor and the landowner enabled TLC’s purchase of a conservation easement on Harland’s Creek Farm. You can support Harland’s Creek Farm at the Durham Farmers Market and through their CSA.

Though every day, farms in North Carolina are being taken permanently out of production, Triangle Land Conservancy also works with farmers every year who are seeking ways to make sure their land remains in production. By 2025 TLC plans to permanently conserve 3,000 acres of farmland and explore new strategies to address troubling trends in farm transitions. In the last six months our easement landowners ensured that 550 more acres of working lands in the Triangle are still providing local food, wildlife habitat, and clean water.



## A new season of growth on the farm

By Elena Peterman

Along with Spring arrives abundant growth at Williamson Preserve! Visitors to the preserve will notice a flurry of activity as new farm projects break ground. As our dynamic community of farmers at the preserve grows, keep an eye out for new faces and exciting collaborations.

There are also plenty of new happenings with our established farm partners, Newbold Farms and Leaf & Limb. Jake and Catherine Newbold, our talented regenerative cattle farmers, continue to innovate and expand. Over the winter, they complemented their existing rotational grazing strategies with cover cropping, aiming to improve soil health in their fields.

Newbold Farms' climate responsive strategies take center stage in the Duke University Bass Connections project "Regenerative Grazing to Mitigate Climate Change", which seeks to understand and scale cattle farming

practices that contribute to carbon sequestration. We are also excited that Newbold Farms continues to work closely with our partners at Wake County Soil and Water Conservation District on cover crop grants and with NC Choices, an initiative through the Center for Environmental Farming Systems.

We are so grateful to all of our partners and their continued support of our farmers! And finally, the herd continues to grow at Newbold Farms! You can expect lots of cute cow content this spring as we welcome calves to the world.

Likewise, Leaf & Limb continues to build out their native tree nursery on the preserve, with exciting developments on the horizon. You can expect to see some big changes just off the Two Pond Loop Trail in the coming months as we install a keyline water management system in the Chickasaw Plum Field.



Photo of Yvonne Mbugua and Elena Peterman

In consultation with Mark Shepard, an expert on water in regenerative agriculture systems, TLC and Leaf & Limb are installing a series of interlocking channels in the field to improve water efficiency in this emerging agroforestry system.

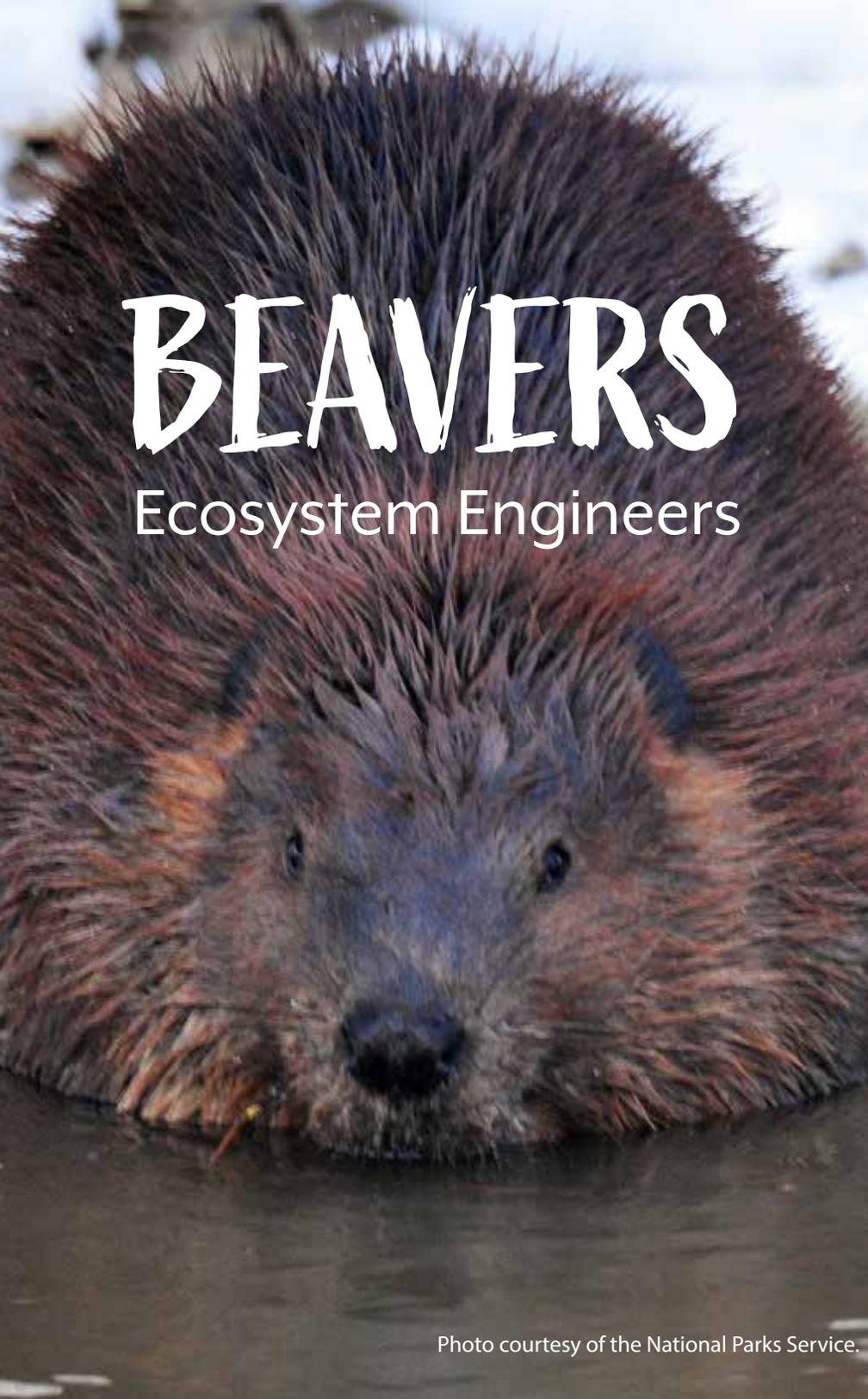
In spreading and storing rainwater across landscapes, keyline systems minimize the need for carbon intensive irrigation. Additionally, keyline water management mitigates both flood and drought risk in agroforestry systems, making it an important tool in shoring up climate change resilience.

This spring has also brought new and strengthened partnerships to the preserve. In particular, TLC is thrilled to deepen its partnership with Knightdale High School at Williamson Preserve through an inaugural KHS internship. We've been lucky enough to work with Yvonne Mbugua, an exceptional senior in the Environmental Studies Academy, on a number of projects including soil testing, wildlife monitoring, and social media engagement this semester.

Yvonne is doing great work in engaging KHS teachers and her peers around land conservation and TLC's activities at the Williamson Preserve, championing our goal of connecting young people with nature. Especially at a time when in-person programming is limited, we're so thankful to have Yvonne's insight and energy to inspire our engagement efforts at the preserve. There's plenty more to come with this exciting partnership – stay tuned!

## Request for Agricultural Proposals

Farmers interested in projects such as small-scale annual crop production, market gardens, cut flower operations, beekeeping, small livestock, or community-focused garden projects are invited to submit proposals for the use of farmland at the Williamson Preserve. If interested, reach out to Elena Peterman at [americorp-wp@triangleland.org](mailto:americorp-wp@triangleland.org).



# BEAVERS

## Ecosystem Engineers

**By Caroline Durham**

Weighing in anywhere between 35 and 50 pounds, beavers are North America's largest rodent. In the 1800s, beaver fur was a valuable trade item that nearly drove the species to extinction.

Thanks to restocking efforts in the early 1900s, beaver populations have fully recovered, and many landowners across the Triangle have been impacted by their presence. Some landowners might not realize that beavers are valuable to humans for reasons other than their pelts. Recent studies have shown that North America's largest rodent has a positive impact on water quality.

Similar to us, beavers are experts at manipulating their environments to create what they need. Beavers make their own habitat by constructing dams on flowing water to establish deep ponds in which they can swim. Within these ponds, beavers construct lodges, where they live and safeguard their young. The pond itself provides protection to the beaver colony from predators such as coyote, bear, etc.

While the beavers' motives might be selfish, the wetlands they form ultimately help humans. Pollutants from cities and agricultural fields are washed overground by rainfall until they reach water bodies. If those pollutants reach a wetland, the velocity of flow is reduced and pollution particles have time to settle onto the bottom of the wetland, where they might bind to soil or be taken up by plants.

As much as 90% of sediments in runoff could be removed if water passes through a wetland. Compare that to a situation where a wetland isn't present and those pollutants flow straight into Jordan Lake or Falls Lake, which are major sources of drinking water for the Triangle. Not only is drinking water compromised, but all of the species that depend on those water sources could be harmed by pollutants from many miles away.

The US Department of the Interior published a study in 1996 that showed North Carolina's wetlands have decreased from 11 million acres at the time of colonization to 5.7 million acres. As the Triangle's population continues to grow, wetlands provide a solution to mitigate negative effects of development such as increased water pollution. Some cities are building their own wetlands to help with pollution, but beavers provide wetland construction free of charge.

As long as beavers don't interfere with landowners' use of the property, they provide many benefits to people and wildlife; however, beaver ponds might not be ideal in residential areas or if they're interfering with agriculture or silviculture. For this reason, beavers can become a nuisance for some landowners.

The traditional solution for beaver management has involved trapping and removal of all beavers in an area. While trapping is sometimes necessary to protect property, a study performed by the Humane Society in 2006 showed that trapping as a management solution has a 79% failure rate within two years due to resettlement by new beavers.



Alternative management options include coexisting with beavers by managing their ponds to not interfere with conflicting land use.

Triangle Land Conservancy's stewardship team has been challenged for years by the large beaver dam at Brumley Nature Preserve. The dam continued to flood our trail system and cause problems for people enjoying the preserve. Because TLC understands the beavers' positive impact on water quality and the ecosystem, we decided to re-route our trails and coexist alongside the beavers. To do this, we needed to make sure that the beaver pond wouldn't continually grow and flood more of the preserve.

Last summer, we installed what we call a "beaver deceiver," otherwise known as a pond leveler or a flow device. The beaver deceiver was constructed using a PVC pipe to create a permanent leak in the dam that the beavers cannot stop. One end of the pipe has several drilled holes and then is surrounded with wire so that beavers can't dam the flow.

The beaver deceiver has worked very well for TLC and similar flow devices were satisfactory for 93% of Massachusetts landowners in a 2006 study performed by Tufts University. Additionally, a study by the Virginia Department of Transportation found that for every one dollar spent on flow device installation, eight dollars was saved in future road repairs, maintenance, and beaver population control activities.

Beavers are undoubtedly impressive animals, but living or operating near a beaver dam can be difficult. Understanding beavers' importance to the environment is important when deciding on a management plan.

**For more information about TLC's beaver deceiver or its installation, please contact Caroline Durham at [cdurham@triangleland.org](mailto:cdurham@triangleland.org).**

**For more information on beaver management, visit [ncwildlife.org/beaver](http://ncwildlife.org/beaver).**

# TLC welcomes 4 new staff members!



**Diquan Edmonds** joined TLC in December 2020 as the **Education and Outreach Manager**. Previously, Diquan worked with the North Carolina Recreation and Park Association.

He holds a Master's degree from N.C. State University, where his research focused on diversity, equity, and inclusion in the outdoors.

Diquan is passionate about conservation and connecting people to our natural resources.



**Jordan Iddings** joined TLC as the **Land Steward Associate** in January 2021. She previously worked as a habitat restoration technician for Portland Parks & Recreation in Oregon.

Jordan gained a love of the outdoors through travel and farm work, and she's worked on farms from New Zealand to Norway.

Jordan graduated from UNC Chapel Hill, studying Environmental Studies and a minor in History.



**Brenna Thompson** joined TLC as the **Land Protection Manager (East)** in January 2021. Originally from the White Mountains of NH, Brenna spent much of her childhood outdoors and developed a passion for conservation.

Brenna has worked at large foundations, including the African Wildlife Foundation in Washington D.C., as well as other land trusts. She holds a Master's degree from Duke.

She is excited to be back in N.C.!



**Cole Stanley** started at TLC as **Communications Manager** in February 2021. Cole has worked in journalism, as well as non-profit and higher ed communications.

He grew up in the foothills of VA, moving to the NC Piedmont as a teen. Cole attended UNC, studying environmental politics.

Among other things, Cole is passionate about nature and writing, which he does sometimes for pay, and often for fun.

# Growth and Gratitude

By TLC Staff

For more than a year now, our Triangle communities, like people across the world, have faced challenging times. The months since the beginning of the COVID-19 pandemic have been a period of challenge and change, but also of resiliency and reflection.

Over the last year, many people have discovered a deeper, more profound appreciation for nature, and its role in maintaining the health of our bodies and minds. Others have taken their first steps along the path to becoming lifelong lovers of the natural world.

TLC has witnessed this firsthand. We have experienced an outpouring of support from communities in every corner of the Triangle area we serve. Williamson Preserve opened during the pandemic, thanks to support from our members. Since opening, it has kept pace with usage at Brumley Preserve, with both properties hosting 3,000 or more visitors per month.

In fact, TLC has seen more than

*double* the number of visitors to each of our preserves. Here's what just a few of those visitors had to say about our preserves this past year:

*"Being able to spend time outdoors at TLC properties during these trying times has helped me stay sane. Thank you for all that you do to purchase and maintain these beautiful places!"*

*"We all need Vitamin N(ature) and TLC helps provide it. Thank you."*

*"Having natural spaces to get out and recharge in and for nature to thrive and reproduce in is absolutely priceless. Thank you for protecting these spaces!"*

The recent surge in interest has meant more people walking, hiking and biking at our preserves. This creates an increased need for trail maintenance, repairs, and clean up. While we are just starting to have small in-person volunteering opportunities again, and we look



forward to being able to host volunteer groups that make this work possible.

## Staying Safe

We are overjoyed with the opportunity to connect with you all through partnerships, events, and volunteer opportunities in the coming months! We plan to keep in-person activities small, and are requiring all participants to be

masked at all times and socially distant whenever possible.

Be sure to visit [TriangleLand.org/explore/events](https://triangleland.org/explore/events) for the most up to date information about events. Have an idea for a new partnership, event, or unique opportunity? Please email Diquan Edmonds, our Education and Outreach Manager at [dedmonds@triangleland.org](mailto:dedmonds@triangleland.org).

Photo: John Petranka



## SAVE THE DATE: TLC GIVING DAY IS APRIL 22

This Earth Day, join us in raising \$60,000 in 24 hours as we work to accelerate the pace of conservation in the Triangle. Double your impact!

[TriangleLand.org/GivingDay](https://TriangleLand.org/GivingDay)

### TLC Parts Ways with EarthShare NC

After more than 20 years, TLC decided to part ways with EarthShare NC, a nonprofit helping North Carolinians support environmental groups through workplace giving. While TLC has been extremely grateful for our partnership with EarthShare, workplace giving programs have changed significantly and onerous campaign policies make donor stewardship difficult.

TLC continues to be a giving option in all “direct pay” campaigns where third-party administrator are not involved. We also accept all corporate matching gifts. To learn more visit: [bit.ly/3qyNcRE](https://bit.ly/3qyNcRE) or contact Casey Therrien, Associate Director of Philanthropy, [ctherrien@triangleland.org](mailto:ctherrien@triangleland.org).

### The smartest way to save on taxes

Tax season is here! As our supporters are organizing their finances before the tax deadline, many are surprised to learn about one simple way to save on taxes while supporting a healthy and vibrant Triangle region, by giving directly from your IRA tax-free, you can make a powerful difference for the TLC — to your own financial benefit! IRA gifts reduce your future tax burden and can meet your required minimum distribution for 2021.

Start your smarter gift today at  
[FreeWill.com/QCD/TriangleLand](https://FreeWill.com/QCD/TriangleLand)



## Get Involved!

Throughout the pandemic, our volunteers have worked tirelessly to support the mission of TLC. As a new dawn approaches, we are extremely excited to connect with you! We encourage you to get involved with TLC by becoming a volunteer. Please visit [TriangleLand.volunteerhub.com](https://TriangleLand.volunteerhub.com) to make a volunteer profile, and stay up to date on volunteer opportunities available.

## Triangle Explorer

Explorers of all types have been investigating, learning, and playing outside since the program's start in April 2020, but with the addition of seasonal badges (which you can see to the right) and new prizes, we have seen a significant increase in participation from the future stewards of our lands. Check out our Triangle Explorer at [TriangleLand.org/explore/triangle-explorer](https://TriangleLand.org/explore/triangle-explorer).



## Mini Challenges

The Hiking Challenge has continued to be a hit! With support from the community, we have decided to start new seasonal "Mini Challenges." These range from logging the most distance, to trail running, trail bingo, and, currently, most number of hikes on TLC properties.

Remember to always tag us in your photos when you #HikeTLC! Visit [TriangleLand.org/explore/hiking-challenge](https://TriangleLand.org/explore/hiking-challenge) to learn more.



## Preserve Reminders

- **Stick to the trails** and bikers to ride only where designated (**follow signage!**).
- **Motorized vehicles** – including one-wheelers – are not permitted on trails.
- If you decide to bring your dog, **they must be on a leash.**
- If your dog relieves itself on a TLC property, you must **clean it up and take it with you.**



# Upcoming Events

As we're encountering uncertainty with Covid-19 restrictions, be sure to visit [TriangleLand.org/explore/events](https://www.triangleland.org/explore/events) for times, registration and the most up to date information about events.

## APRIL

**17 Star Party Williamson Farm and Nature Preserve** | Register and join us at Williamson Farm and Nature Preserve to take part in the annual NC Science Festival Star Party with TLC!

**22 TLC Giving Day #NatureNeedsTLC** | On Earth Day, join us in matching \$60,000 in 24 hours as we work to accelerate the pace of conservation in the Triangle. Your gift will be doubled! [TriangleLand.org/GivingDay](https://www.triangleland.org/givingday).

**24 Flower Hill Clean-Up Flower Hill Nature Preserve** | Meet us at our Flower Hill Nature Preserve for a countywide clean up with our friends at Johnston County Parks. Visit [TriangleLand.VolunteerHub.com](https://www.triangleland.org/volunteerhub) to register for this opportunity and more.

## MAY

**1 Get Wild - Pollinator Wizard Horton Grove Nature Preserve** | Register and join us at Horton Grove Nature Preserve to explore all of the pollinator wizards in the Triangle! Get Wild and learn about the buzzing bumble bee, the fluttering butterfly, and even the benevolent bat and how they make the world go round.

**14 Field Trip Friday Virtual** | The Museum of Life and Science is hosting a virtual field trip to Horton Grove Nature Preserve! Be sure to tune into the live stream at noon at [LifeAndScience.org](https://www.lifeandscience.org).

## JUNE

**19 Juneteenth Celebration Horton Grove** | Celebrate Juneteenth with Triangle Land Conservancy at Horton Grove Nature Preserve, a TLC property whose history is intrinsically linked to the people that shaped it. More details to follow.

**20 Father's Day Hike White Pines Nature Preserve** | To celebrate Father's day, join us on a family-friendly guided hike at White Pines Nature Preserve! Time TBD.



Front cover photo by Christine Wilson.  
Back cover by Don Kinney.



tlc

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CONSERVANCY

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