

the land
Steward

MAINSRING 2020



Staff

Jordan Smith

Executive Director

Sharon Willard Burdette

Administrative Assistant

Sara Ruth Posey-Davis

*Land Conservation
Manager*

Dennis Desmond

Stewardship Coordinator

Teresa Falzone

Finance Manager

Ben Laseter

Deputy Director

Bill McLarney

Senior Scientist

Jason Meador

Aquatic Programs Manager

Kelder Monar

Stewardship Associate

Rachel Newcomb

*Conservation Outreach
Associate*

Molly Phillips

*Communications
Coordinator*

Board of Directors

Jason Love

Chair

David Adams

Vice-Chair

Rita Salain

Treasurer

James Stork

Secretary

Chris Brouwer

Fred Crawford

Jim Garner

Bill Gibson

Ed Haight

Connie Haire

Russ Harris

Hope Huske

Terrie Kelly

Lisa Leatherman

Johnny Strawn

Ben Steere

Emeritus Directors

Patricia Smith Adams

Richard Clark

Dick Heywood

Lydia Sargent Macauley

Ken Murphy



From the Board Chair

It is a blue-sky September day, and the cool breeze hints that autumn is just around the corner. In my yard, Joe-pye weed is buzzing with bumble bees; silver-spotted skippers dart back and forth over the pink blooms. A pair of American goldfinches enjoys the seeds of a nodding sunflower. Despite this troubled world of ours, the goldenrods are blooming, butterflies are searching for sweet nectar, and soon the mountains will be wearing their autumn coat of colors.

And Mainspring Conservation Trust will continue its good and necessary work.

For more than 23 years, Mainspring Conservation Trust has helped conserve and steward our mountains and valleys. In this issue, you'll learn about the protection of the Watauga Mound and Town site, an important Cherokee village between Cowee Mound and Nikwasi Mound. You'll read about King Meadows, a conservation project protecting more than 850 acres of high mountains, trout waters, and rare flora and fauna. And you'll learn how Mainspring continues to monitor the health of our waters while adapting to distancing restrictions.

Good news can sometimes be hard to find these days. But know that good things are happening, thanks to Mainspring Conservation Trust and supporters like you.

Sincerely,

A handwritten signature in black ink, appearing to read 'J P Love', written in a cursive style.

Jason P. Love
Chair
Mainspring Conservation Trust

Cover photo: An eastern tiger swallowtail flutters around Joe-pye weed on the banks of a creek just north of Franklin. Credit: Fred Alexander

The annual publication
about the activities of
**Mainspring
Conservation Trust**

November 2020



Franklin | Murphy | Sylva
828.524.2711
www.mainspringconserves.org



Contents

Conserving Middle Town

The preservation and protection of Watauga Mound..... 4

A Place to Call Home

Historic Hopper House property gifted to Mainspring..... 8

Planning Ahead

Leave a lasting legacy..... 12

The Big Picture

Mainspring's new mapmaking software..... 14

Majestic Resilience

Treasuring Graham County's natural beauty..... 16

20/20 Vision

An alternative method of monitoring stream health..... 20

Let It Flow

A new world opens for native fish..... 23

Conservation Starters

Meet two new Mainspring team members..... 24

And More

Goodbye with Gratitude..... 26

The Last Word..... 27



Page 8



Page 16




Page 23

PHOTOS p2, Callie Lynch; p4-7, Fred Alexander + Courtesy of TRC Solutions; p8-11, Fred Alexander + Jennifer Jones; p19, Turtle head - CC: Michael Deslow; Crossbill - CC: Elaine Wilson; Salamander - CC: Seánín Óg; Indiana bat - Adam Mann; Pogonia - CC: Jason Hollinger; p20-21, Fred Alexander; p26, Callie Lynch



Conserving Middle Town

The preservation and protection
of Watauga Mound



To the east of Scenic Highway 28 in northern Macon County sits a plot of land with sweeping views of the Cowee and Nantahala mountain ranges and Little Tennessee River Valley. Mostly level farmland, it would have been easy to develop, and indeed, it almost happened.

When 25 acres went up for sale on the real estate market, multiple potential buyers jumped at the chance to make an offer on the property, and Mainspring added its name to that list. Fortunately, the sellers were interested in protecting the property and chose to sell to the land trust.



“Archaeological and historical research indicate that Cherokee and their ancestors have lived near this site for thousands of years.”

Dr. Ben Steere

Mainspring had a problem, however. In addition to conserving the pasture, there were also significant historical sections of the area that were important to protect. Part of Watauga Mound — one of three ancient Cherokee Middle Towns located between Nikwasi Mound and Cowee Mound — was on the listed parcel. However, the property line ran straight through the middle of the mound, and the other half was not for sale.

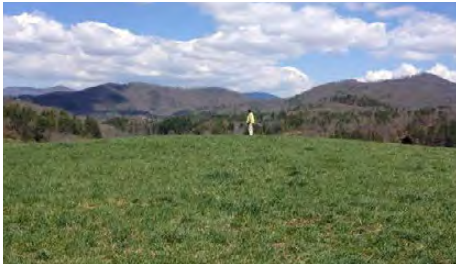
Enter Joyce and Dickie Gibson. Once the Gibsons heard about the conservation effort, they chose to sell their portion of the mound, protecting it and the surrounding area forever.

“We were very interested in conserving the property for future generations to enjoy,” Joyce Gibson says of their decision to sell the farmland to Mainspring. “We didn’t want to see it developed, especially because the land has so much historical significance to the Cherokee.”

The project conserves 40 acres and was funded through a generous donation by Brad

and Shelli Lodge Stanback, along with Mainspring’s internal revolving loan fund. In addition to the mound, it protects much of historic Watauga Town, as well as some outstanding views and conservation values, including a portion of Rocky Branch and wetland soils. Mainspring will continue to keep the property in its most recent uses: leasing it to local farmers for hay and cattle grazing.

In William Bartram’s famous naturalist book *Travels*, in which he details his encounters with Native Americans as he explored the South between 1773 and 1777, Bartram wrote about Watauga from his visit in western North Carolina in 1775. “He described an impressive council house rising above nearby houses and gardens,” says Dr. Ben Steere, associate professor of anthropology at Western Carolina University and director of the Cherokee Studies program. “Bartram was warmly received by a town leader and his sons, and was treated to a meal of venison and corn cakes before traveling to Cowee Town.



"The Watauga Mound is a very important cultural site in the Cherokee heartland of western North Carolina," Steere continues, adding that the mound today can tell a significant story of the past. "Archaeological and historical research indicate that Cherokee and their ancestors have lived near this site for thousands of years."

Although the mound is difficult to discern after years of agricultural use, Principal Chief Richard Sneed of the Eastern Band of Cherokee Indians says it doesn't lessen its importance. "Many of the mounds in the Cherokee heartland have been decimated over the last century by intentional destruction, development and agriculture, making the preservation of sites like the Watauga Mound of critical importance," Sneed says. "Through the efforts of many people — including volunteers, Western Carolina University faculty, and Mainspring Conservation Trust — the Watauga Mound is preserved. We are grateful that this important legacy is being preserved into perpetuity."

Tasha Benyshek, senior archaeologist with TRC Solutions

in Asheville, has completed extensive studies around historic Watauga Town and was an early proponent of protecting this site. "I'm thrilled that so much of this beautiful and historically important site is now protected," she says. "The archaeological saga regarding the location of the Watauga Mound is a long one. It was misplotted on official state records, but locals always knew where the mound was and pointed us to it. Several archaeologists made efforts to correct the record, and we demonstrated that this was where early Great Smoky Mountains National Park historian Hiram Wilburn recorded Watauga Mound in the 1930s."

Mainspring Executive Director Jordan Smith added: "We are extremely fortunate that both landowners were interested in protecting the mound for conservation, and that they were patient as we went through the yearlong process to put all of the pieces together. This farmland with exceptional views was prime for development, and I am proud this special place is now protected forever."

Top left: Great Smoky Mountains National Park historian Hiram Wilburn stands atop Watauga Mound in the 1930s. Bottom left: Recently, an archaeologist visiting Watauga Mound recreated Wilburn's famous photograph.



A Place to Call Home

Longtime supporter gifts
historic Hopper House
property to Mainspring



WITH MOSS-COVERED ROCK walls and hand-cut shaker shingles that protect its log-built barn, exploring the property in North Georgia known as “Hopper House” takes a visitor back in time. However, Maude Bivins had the future in mind when she chose to gift the cabin, outbuildings and surrounding seven acres to Mainspring through her estate plans.

Maude, who passed away in June 2019 at age 92, inherited the property from her lifelong friend and business partner, Jinny Jones. In 1980, Jinny purchased the Hopper House from the Hambidge Center for Creative Arts and Sciences, an artists’ residency in Rabun County, Georgia. She and Maude spent more than 25 years enjoying the scenic property along Betty’s Creek, using it as a getaway from their everyday lives in Franklin until Jinny’s death in 2008.

“Maude and Jinny were both visionary women,” says Fred

Jones, Jinny’s cousin and trustee to Maude’s trust. “Both were teachers by trade, and each had a gift for taking things – textiles, crafts, art, land – that were meaningful yet broken and making them beautiful again. They were also outstanding businesswomen and painstakingly planned for the future.”

Fred believes the Hopper House property resembled the topography and historical significance of Jinny’s childhood summer home in Rhode Island, and it was that sense of nostalgia that drew her to the place. But it was Betty’s Creek, documented by Mainspring’s biomonitoring data as one of the most pristine streams in the Little Tennessee River watershed, to which Maude was most drawn. “Maude had a bench put next to the creek, where she would come and sit whenever she had restlessness or stress going on in her life,” he says. “In Maude’s later days, my wife, Jennifer, and I brought my father and Maude

Betty’s Creek has been documented by Mainspring’s biomonitoring work as one of the most pristine streams in the Little Tennessee River watershed. Unsurprisingly, the soil near its banks provides a perfect medium for growing native plants, such as these ripening blackberries.



Maude Bivins stands on the porch of the historic Hopper House.

“Since neither had children, the intent to pass those blessings down was not limited to their genetic family, but for the human family.”

Fred Jones

down for a picnic, and it meant so much to her to be back in ‘her spot.’ I never saw Maude happier and more at peace than when she was at that bench by the creek.”

Following Jinny’s death, Maude was faced with paying a significant inheritance tax. She worked with attorney Richard Jones, Fred’s father, to mitigate those costs by partnering with a land trust in Rhode Island to conserve the summer home there. During that project, she learned about her local land trust and, in 2009, donated a conservation easement on the Hopper House to Mainspring. Maude continued to use the home while still protecting its high water quality, the forested areas, scenic values and productive agricultural values.

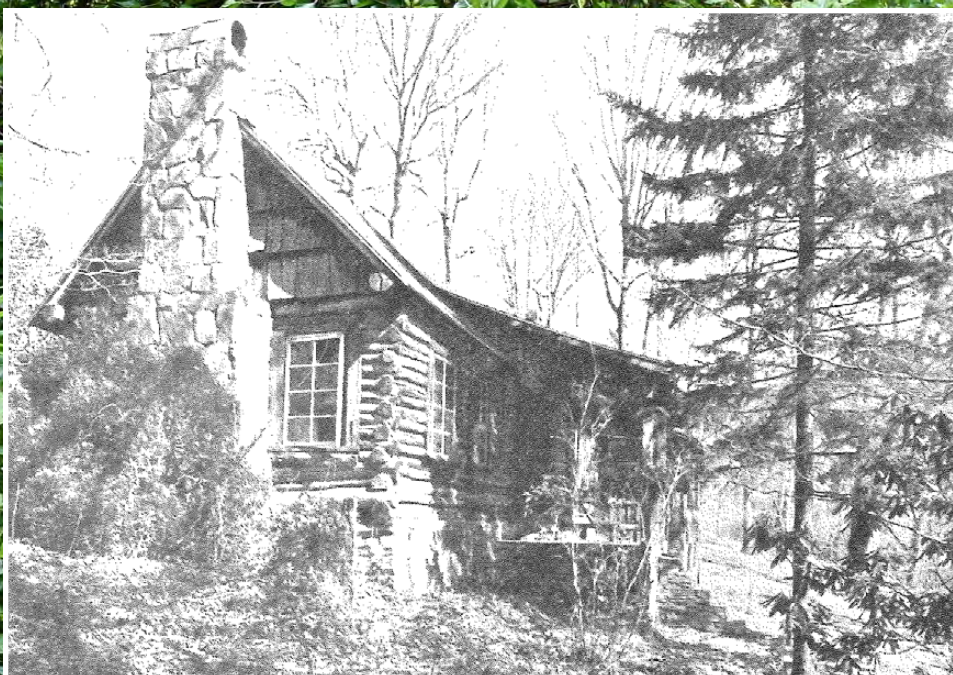
She also got to know Mainspring’s founding Executive Director Paul Carlson and his successor, Sharon Taylor. “Maude was gracious, a true Southern lady and, in practicing the home economics she taught, she was frugal and financially conservative,” Sharon says about Maude. “When she talked to us about a planned gift, she knew the Hopper House would one day be a significant asset to support Mainspring’s work. Having grown up on a farm, she loved land and relished saving special places, like her beautiful seven acres on Betty’s Creek, and also advocated for education in all areas. She hoped her gift

to Mainspring would help the continuation of both.”

Current Executive Director Jordan Smith says gifts like this help Mainspring further its mission. “Many years ago, we were able to conserve an important place that protects so many natural and cultural resources,” he says. “Now, years later, we have the opportunity to sell it to someone who will care for the property as much as Maude and Jinny did. Mainspring will seek out buyers who will continue to uphold these same conservation values. We use the proceeds from sales of properties such as this to further our mission and conserve other special places throughout our service area.”

Fred says Maude’s ability to see the impact she could have was an important character trait. “Maude valued history and making sure that whatever you do would last and grow over time,” he says. “She was making a business decision, yes, but she was also keenly aware that she was supporting a connection between the past and the future.

“Maude and Jinny were caretakers of a combination of natural and financial resources. Still, they used their own wisdom, intelligence and acumen to not only care for it, but also to help it grow. Since neither had children, the intent to pass those blessings down was not limited to their genetic family, but for the human family. That’s a great legacy for us all.”



HOPPER HOUSE HISTORY

Originally from North Carolina, Samuel “Sammy” Hopper and his family were among the earliest settlers of Rabun County, Georgia, crossing over the state line in the early 1800s to build a homestead just along the border. At the head of Betty’s Creek, where the main stream converges with Messer Creek and Barker Branch, Sammy built the iconic sturdy poplar log home that still stands on the property today.

Over the years, Sammy and his sons bought up most of the land on the upper half of the valley — earning a reputation for both buying and selling valuable land and for their excellent hunting skills. When Sammy died in 1848, the original home passed down to his son, Tom Hopper, and Tom’s wife Louisa. Though Tom was killed in the Civil War, Louisa and their children stayed on the land for most of their lives — and the home itself passed down to their son, John “Jepp” Hopper, who added onto the original structure, building new rooms and a front porch, around the start of the 20th century.

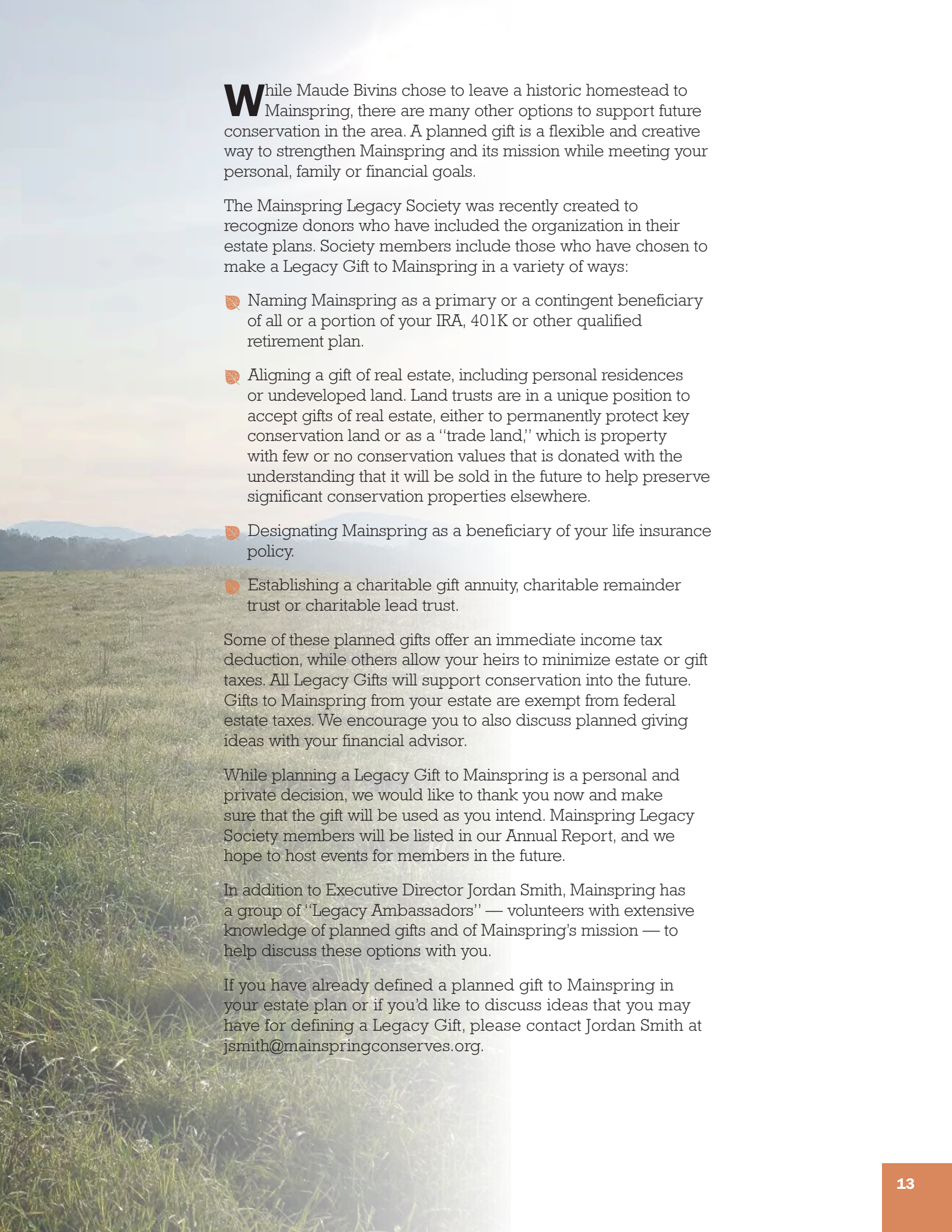
Jepp’s children were the last Hoppers to be born and raised in the Hopper House, and, in the 1930s, the home was sold to textile artist and weaver Mary Crovatt Hambidge, who later founded The Hambidge Center for Creative Arts and Sciences nearby. For seven years, Mary’s friend and mentor, Eva Palmer-Sikelianos, took up residence in the Hopper House, spending her time both weaving at the center and fixing up the then-disheveled home.

Eva eventually returned to her home country of Greece, and, seven years after Mary’s death in 1973, the home was sold to Jinny Jones.

Planning Ahead

Leave a lasting legacy





While Maude Bivins chose to leave a historic homestead to Mainspring, there are many other options to support future conservation in the area. A planned gift is a flexible and creative way to strengthen Mainspring and its mission while meeting your personal, family or financial goals.

The Mainspring Legacy Society was recently created to recognize donors who have included the organization in their estate plans. Society members include those who have chosen to make a Legacy Gift to Mainspring in a variety of ways:

- 🍁 Naming Mainspring as a primary or a contingent beneficiary of all or a portion of your IRA, 401K or other qualified retirement plan.
- 🍁 Aligning a gift of real estate, including personal residences or undeveloped land. Land trusts are in a unique position to accept gifts of real estate, either to permanently protect key conservation land or as a “trade land,” which is property with few or no conservation values that is donated with the understanding that it will be sold in the future to help preserve significant conservation properties elsewhere.
- 🍁 Designating Mainspring as a beneficiary of your life insurance policy.
- 🍁 Establishing a charitable gift annuity, charitable remainder trust or charitable lead trust.

Some of these planned gifts offer an immediate income tax deduction, while others allow your heirs to minimize estate or gift taxes. All Legacy Gifts will support conservation into the future. Gifts to Mainspring from your estate are exempt from federal estate taxes. We encourage you to also discuss planned giving ideas with your financial advisor.

While planning a Legacy Gift to Mainspring is a personal and private decision, we would like to thank you now and make sure that the gift will be used as you intend. Mainspring Legacy Society members will be listed in our Annual Report, and we hope to host events for members in the future.

In addition to Executive Director Jordan Smith, Mainspring has a group of “Legacy Ambassadors” — volunteers with extensive knowledge of planned gifts and of Mainspring’s mission — to help discuss these options with you.

If you have already defined a planned gift to Mainspring in your estate plan or if you’d like to discuss ideas that you may have for defining a Legacy Gift, please contact Jordan Smith at jsmith@mainspringconserves.org.



The Big Picture

Mainspring gets new mapmaking software

The Nature Conservancy

Right:
These two maps of a current project in Jackson County, produced using ArcGIS Pro, show two different perspectives of the same area using the program's 2D and 3D technologies. This program allows Mainspring to see the overall area of a project, as well as the visual impact a project has on surrounding areas.

MAPS ARE CRUCIAL TOOLS THAT tell stories about the lands that we conserve.

Since every landowner, donor and member of the public can't visit each project every time, maps are the key to telling the visual story and looking at the big picture of our service area.

So, imagine when Mainspring has a project and the executive director needs a revised map for a meeting with a donor by the end of the day. It should be an easy task. But for many years, it was not.

Mainspring uses Esri software, the same tools used by city government, oil companies and the military. For years, we used Esri's ArcMap program — a powerful tool, but with architecture that dates back to 1996, one year before Mainspring's founding. In the last two decades, our expectations for technology have advanced. For example, using a space instead of an underscore shouldn't make software crash in the year 2020, yet even that small mistake could crash an entire afternoon's worth of work.

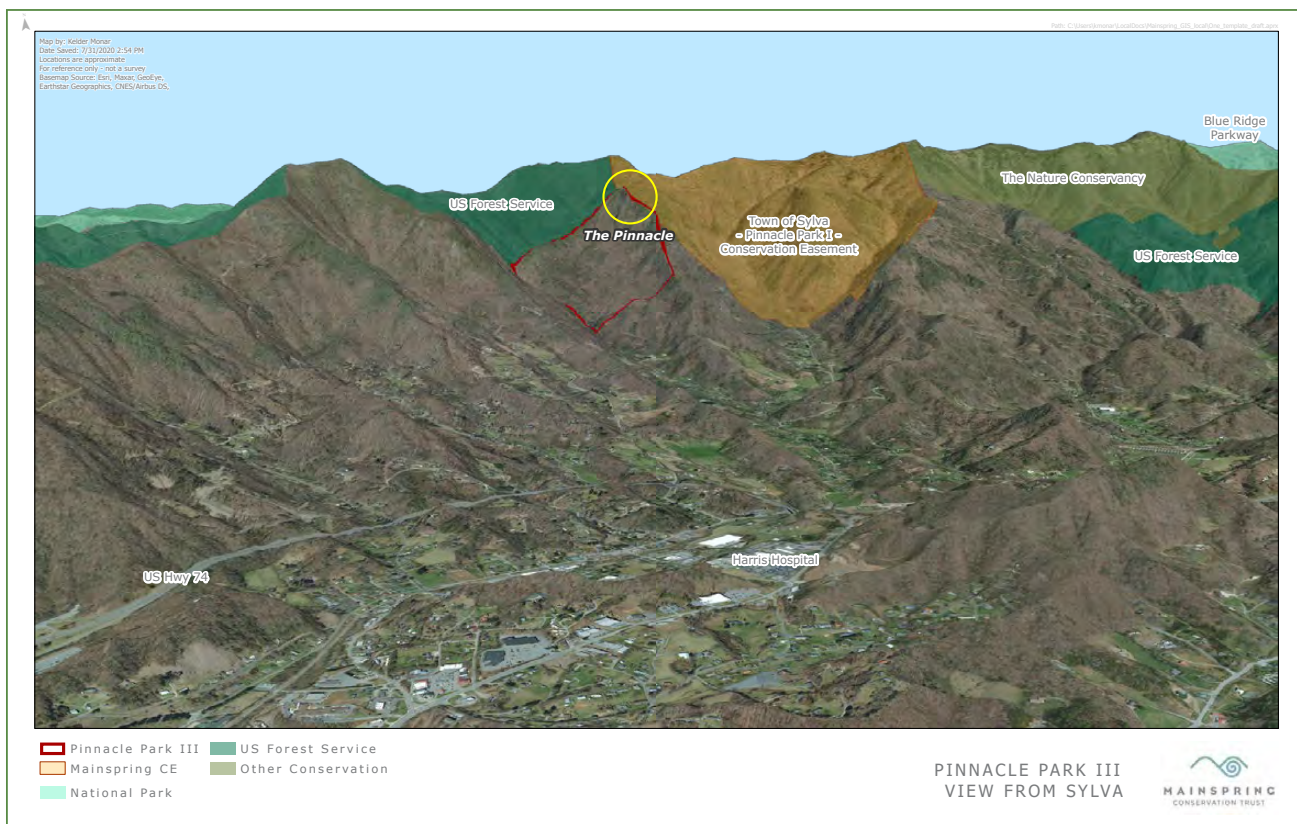
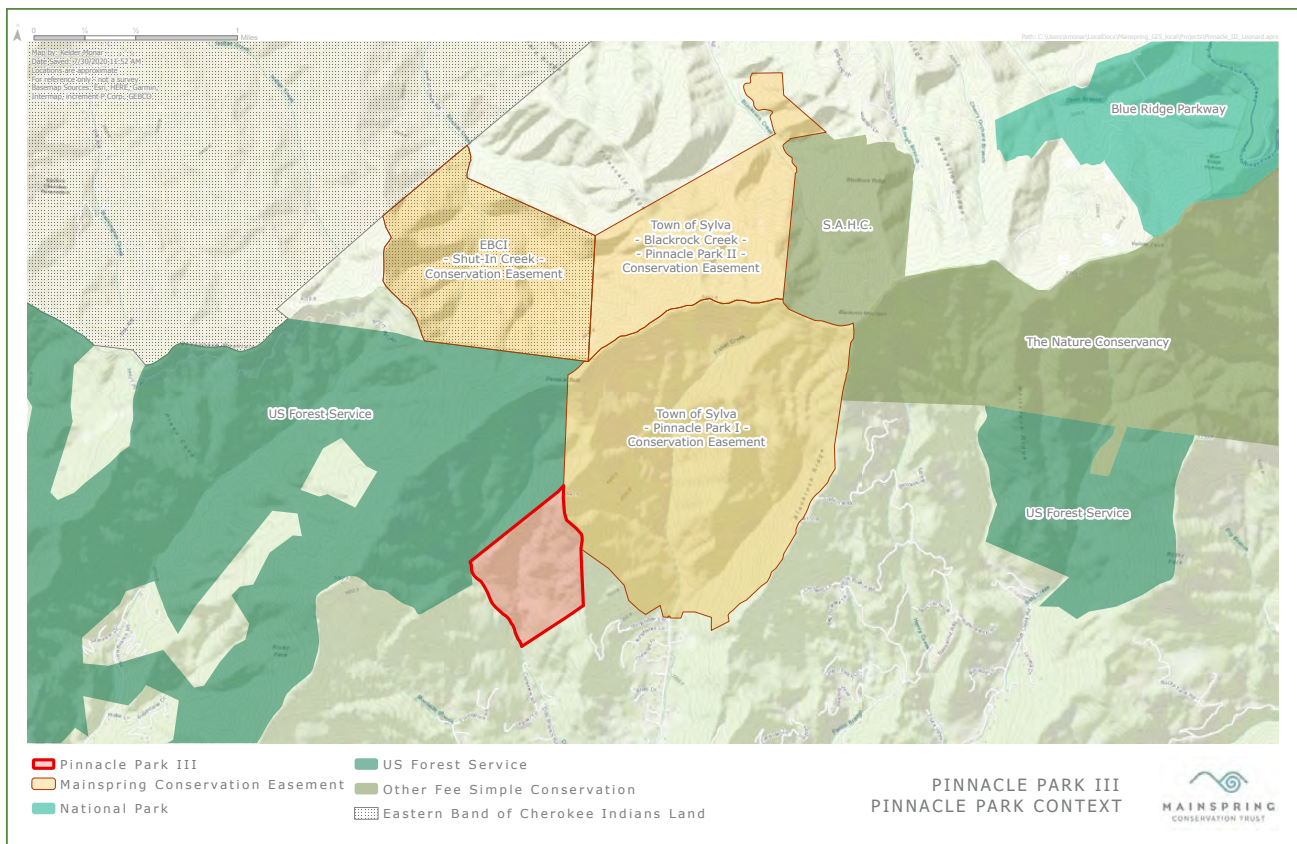
While technology was advancing, Mainspring's portfolio of land interests also ballooned, as has the amount of publicly available data. These are good things, but our system was outgrowing our capacity to manage it.

Thankfully, a few years ago, Esri created a new software

called ArcGIS Pro — and, in 2020, we officially booted it up and began the transition. In February, our GIS manager, Kelder Monar, attended the Esri Federal GIS Conference, where speakers discussed ArcGIS Pro's latest capabilities at length. Then, during the COVID-19 shutdown, he had time to attend an online course to learn the new software. Now, he's pro-Pro — a true convert to the new technology.

Not only is the new software simpler to use and more visually appealing, but it also comes with exciting 3D mapping and online capabilities. Unlike its predecessor, Pro can display large files well, so we intend to create a few authoritative files of our internal data and some for outside data. For other outside data, we'll use web services and let Esri or government agencies update them. For now, the two systems exist side-by-side, as it will take Mainspring many months to fully incorporate the old data into the new system and reproduce 20 years of mapmaking in the new program. But it's an important step in the right direction.

At the back of our storage closet, you'll find old maps with curling edges, each project carefully colored in by hand. Though the tools have clearly changed, our mission is the same.







Majestic Resilience

Treasuring Graham County's natural beauty

TEN YEARS AGO, MORE THAN 770 acres came up for sale in one of the wildest, most rugged and remote areas of the North Carolina Mountains. Located less than two miles from the Tennessee border in Graham County, just off the Cherohala Skyway near Hooper Bald, the property has elevations ranging from approximately 3,700 to 5,200 feet. Although it's mostly dominated by mature Northern Hardwood and High Elevation Northern Red Oak Forests, there is a small half-acre opening where the land got its local name: King Meadows.

Mainspring (then known as the Land Trust for the Little Tennessee) knew this was a special piece of property, but in 2010 lacked the resources to purchase such a large tract. The tract was eventually sold to a private buyer — but the story doesn't end there.

In 2017, that same buyer was interested in divesting the property to a conservation organization and contacted Mainspring. This time, the land trust was ready. With the assistance of philanthropic leaders Fred and Alice Stanback and a donation that paid for legal fees and staff costs, Mainspring was able to acquire the property, forever protecting one of the most diverse areas of western North Carolina.

Falling leaves accumulate along the rocks of Squally Creek on a crisp autumn morning.



“From an ecological standpoint, this is probably one of the most special places we’ve ever conserved.”

Jordan Smith

In 2019, in the midst of applying for a North Carolina Clean Water Management Trust Fund grant to place a conservation easement on King Meadows, Mainspring began working with another set of private landowners to purchase an additional 105 acres adjacent to the tract, known as Bee Knobs. This year, using funding from CWMTF, Mainspring purchased the Bee Knobs tract, combined it with the adjacent King Meadows tract, and conveyed a conservation easement on the 884.34-acre property to the State of North Carolina.

“From an ecological standpoint, this is probably one of the most special places we’ve ever conserved,” says Jordan Smith, executive director of Mainspring. “By keeping this area as wild as possible, we’re able to protect rare flora and fauna, along with native brook trout.”

The remoteness of the property creates some problems, however. Illegal use of off-road vehicles has negatively affected the water quality. The meadow was once much larger before new trees sprouted, and restoring the former “bald” habitat could benefit species that require early successional habitat. Mainspring is currently researching and applying for available funding

possibilities to help mitigate these important issues.

Even with the restoration needs, however, the property has exceptional conservation values. A Biodiversity Conservation Values Assessment completed in 2015 showed that nearly all of the property classifies as “Above Average” and “Far Above Average” as a resilient site, making it an important area to protect in the face of climate change. High-quality natural community occurrences (those ranked “Excellent” or “Good,” regardless of rarity) occupy 97 percent of the property, and 11 of the state’s rare wildlife species and 24 state rare plant species were observed on the property (see sidebar for more information).

“Graham County is a special place and, arguably, one of the most scenic counties in the state,” Smith says. “Visitors come from all over the world to be in nature and explore this area, and, although much of the county is conserved, a few special places remain that deserve protection. We’re grateful to complete a project that not only enriches the viewshed, but also protects the water quality and wildlife habitat for fishermen and hunters.”

King Meadows' Wild Treasures

Cuthbert's turtle head

(*Chelone cuthbertii*)

Listed as a Federal Species of Concern, this flowering plant lives in seeps and wet areas throughout the property. This population is the first one documented in Graham County.



Southern Appalachian red crossbill

(*Loxia curvirostra*)

This bird is a Federal Species of Concern that lives only at high elevations in the Southern Appalachians. It uses its large bill to split open pine and spruce cones to eat the seeds.



Red-legged salamander

(*Plethodon shermanii*)

The Plethodon salamanders on this property show characteristics of two additional species, probably a result of past interbreeding and hybridization. For instance, most of the red-legged salamanders on this property don't have red legs!



Indiana bat

(*Myotis sodalis*)

This endangered bat was identified using an acoustic survey technique that recognized the pattern of its calls used for echolocation. During the day, they roost on dead or dying trees, which are common in old-growth forest on the property.



Large whorled pogonia

(*Isotria verticillata*)

The rare woodland orchid doesn't produce nectar, yet attracts pollinators anyway with its nectar guides and extravagant purple sepals.



20/20 Vision

Rachel Newcomb learns an alternative method of monitoring stream health

Rachel, Preston and Atley inspect caddisfly nests.

WINDING THROUGH THE TWISTS and turns in the road toward Burningtown on a sunny September day, I've joined our two interns, Atley Elliott and Preston Pyatt, for a day of habitat assessment north of Franklin.

I'm curious about what to expect with my first experience using Stream Visual Assessment Protocol (SVAP). SVAP is a tool that uses visual observation of an area in a stream to score its current health. Aspects of the surrounding environment — such as bank condition, vegetation quantity and quality, canopy cover, trash and non-trash pollution, and barriers to fish movement — are among the elements used to score a site. Each element can be gauged and given a score between one and four by the naked eye, so the only equipment needed is paper and a pencil to carry out this work.

As I strap on my waders and steady my footing in the creek, I listen as Atley runs through the SVAP scoring sheet. "SVAP is significant because it tells a lot about what is happening with the habitat," she says. "The results provide the basis of the stream's health status to landowners."

Preston adds, "SVAP is a much more straightforward way to communicate. You can understand a great deal about the fish populations from just looking around the stream."

An SVAP score can easily identify any elements of concern. Anyone can comprehend the data collected through this approach, which is useful for landowners who care about improving and protecting the quality of their streams. In fact, SVAP was developed primarily as a tool for farmers to monitor their own land.



It's also been a helpful option to use this summer during the pandemic, when Mainspring has needed an alternative way to study streams using fewer volunteers. Compared to IBI, or Index of Biological Integrity, Mainspring's primary way of analyzing a stream's health, SVAP is quicker, requires little technical skill and uses few resources. IBI requires the teamwork of several people holding up seine nets, two people using electrofishers and others carrying buckets. It may take four hours to conduct an IBI, but SVAP can be applied in about fifteen minutes' time. And, often, there is a strong correspondence of scores between habitat quality and biological health.

IBI is a good option for scientists, but SVAP is one of few methods accessible and dependable to the general public. "It is so important to have a tool that anyone can use," Atley says.

As we climb out of the creek and finish our discussion about each element on the score sheet, Preston and Atley reflect on their summer. "I was a fisheries major at the University of Tennessee, Knoxville, and this type of activity was exactly what we learned about," Atley says. "Now with Mainspring, I have the opportunity to put my skillset to use and to expand my knowledge of what I learned in the classroom."

"You can understand a great deal about the fish populations from just looking around the stream."

Preston Pyatt



Much too often, our approach to problem-solving is not done in accordance with the local surroundings, but Mainspring, along with regional partners, have developed a localized version of SVAP, referred to as saSVAP, or Southern Appalachian SVAP, that is suited to meet our specific region's needs.

Mainspring Senior Biologist Bill McLarney provides a deeper perspective of SVAP. "I was originally skeptical of its validity because of the lack of technical knowledge required, but my experience with SVAP has taught me otherwise," he says. "Reducing the spread of a point-rating system seems to eliminate more error than it creates. We are located in a part of the world where point source pollution is not the issue it is in densely settled regions. Most of our issues are related to habitat: barriers, sedimentation, etc.

"People are concerned with water pollution — but they don't always have a thorough awareness of habitat," Bill says. "SVAP

application is about creating awareness among the general public, who will help create the attitudes and the pressure, which in turn leads to landowners doing the right thing."

Sharing this dialogue drills in the overriding importance of the physical habitat both in and around the stream to determine the health of the whole system. We can all help to spread awareness of preserving riparian zones. Whether we are suited up in waders to report on SVAP elements in the creek or we're simply having conversations with our friends and neighbors, we can all play a part in making sure the streams in our region are taken care of for generations to come.

If you are interested in participating in citizen science activities like SVAP, please contact Conservation Outreach Associate Rachel Newcomb at rnewcomb@mainspringconserves.org.

Let It Flow

A new world opens for native fish

WHETHER LARGE OR SMALL SCALE, stream restoration projects are designed not only to look good, but to also improve aquatic habitat. Still, it's great news when data proves the time and work was worth the effort.

Eleven years ago, the Little Tennessee Watershed Association received a grant to identify human-caused barriers of fish movement in Macon County. LTWA partnered with state and federal agencies to implement this grant just before merging with the Land Trust for the Little Tennessee, which later changed its name to Mainspring Conservation Trust.

Barriers to fish movement almost always occur when culverts to roads and driveways are improperly placed or are not the correct size.

From that 2011 study, one barrier in particular stood out above all the others as a relatively easy fix that would make a huge impact in the lives of native fish. A concrete culvert from the Old Highlands Road, now used for parking access by Pine Grove Baptist Church in Franklin, severed connectivity between the entire Walnut Creek watershed and the Cullasaja River.

Though the solution seemed simple, the project would be costly — so it wasn't until 2016, when the U.S. Fish and Wildlife Service awarded a grant to the N.C. Wildlife Resources Commission for removal of unnatural barriers in the Little Tennessee River basin, that the problem could be corrected. Because Mainspring had already established relationships with

landowners and qualified local servicers through the 2011 study, the organization was contracted by WRC to remove the barrier. The project was completed in early 2019.

Prior to the barrier's demolition, 2015 fish monitoring results indicated that only two native fish species were present above the creek, and 14 native species were present below it. After the barrier removal, however, a 2020 study revealed that an additional seven native fish species were found in the upper segment. Not only does this indicate that fish move back and forth between small creeks and bigger rivers, it means that reconnecting these waterways is important in providing a full, uninterrupted ecosystem.

Besides being a nursery habitat for small fish, Walnut Creek serves as a thermal refuge. Fish that cannot tolerate warm temperatures can escape the heat in the Cullasaja River and swim back to warmer waters as needed.

Additionally, little minnows can swim into Walnut Creek as food for trout, and trout stocked in the Cullasaja can now swim into Walnut Creek. Genetically speaking, small stream fish can now travel between small streams to diversify the population's genetics.

"Water connects us all," says Jason Meador, Mainspring's Aquatics Program manager. "To make a comparison, think of water as the blood running in your veins: Restoration could mean repairing an unhealthy area, or it could mean removing a blockage to reduce stress on a particular vessel. Either way, it's an exercise in healing."

Below: Walnut Creek before, during and after barrier removal. Now, fish can easily move back and forth between streams.





Conservation Starters

Finance Manager Teresa Falzone, left, speaks with Conservation Outreach Associate Rachel Newcomb, right.

TERESA FALZONE BEGAN PART-TIME at Mainspring in February to assist with finance operations (find Teresa's bio in the 2019 Annual Report). Now, Teresa is a full-time member of Mainspring's team, officially taking on the role of finance manager.

Meanwhile, Rachel Newcomb joined Mainspring in July as its conservation outreach associate, a role in which Rachel will lead outreach efforts like hikes, tours and organizing volunteers, while also assisting in Mainspring's projects in the Hiwassee area.

Rachel grew up in Leicester, North Carolina, on a horse rescue farm, and the majority of her youth was spent outdoors adventuring in the woods and in creeks. She

holds a bachelor's degree in environmental studies and public policy at William Smith College and earned a master's in environmental policy and management at the University of Adelaide in South Australia. Rachel has served two terms as an AmeriCorps member and is an avid snow skier and traveler. She also enjoys trail-riding, using her French language skills, and partaking in various fitness activities.

Both women have jumped right into the Mainspring family, but every job comes with a learning curve. We asked Teresa and Rachel about their first few months in the land trust community.

What is the best thing about working at Mainspring?

Teresa: “The people – Mainspring’s staff, board and volunteers are an exemplary bunch. They’re hard-working, passionate about the mission and caring, and it is obvious that they truly enjoy working together. It is such a pleasure and an honor to be a part of this team and to be a part of conserving these beautiful properties for generations to follow.”

Rachel: “I hands-down agree with Teresa! I love getting up in the morning and coming into work knowing that I am fortunate enough to spend my work days surrounded by dedicated, kind people. I am thrilled and so proud to be a part of this team. Everyone I have met who is involved with supporting Mainspring in some capacity is a pleasure to work with. There’s rarely a day without laughter!”

What have you each learned that you previously did not know?

Teresa: “I never knew how complex each transaction is and the amount of work that goes into conserving and maintaining properties, educating the public and interacting with the community. It takes a village.”

Rachel: “She’s right about that! In addition, there is such a vast amount of history regarding the cultural heritage of this region that I was never taught in school, so I have started a lengthy reading list of books recommended to me by staff and other Mainspring supporters to develop my knowledge in this area.”

Teresa: “Oh, and how can I forget: One of the rites of passage if you

are out biomonitoring – or so I was told – is kissing a fish. Sorry to say, I failed that one.”

Rachel: “This rite of passage was news to me too! On my first day out with Bill and the aquatic volunteers, I lost my balance and fully fell into the river, and then kissed a hogsucker, so that was an eventful day. Definitely not something in my original workplan.”

What has been your biggest challenge?

Teresa: “Oh my gosh. I’ve worked at quite a few nonprofits – human services, legal services, healthcare, education – so I expected a smooth transition to working for a conservation nonprofit. Wrapping my head around the entire process has been a pleasant surprise. I need to always remember that every transaction is different – that this isn’t a one-size-fits-all business model, and every project has to be examined in detail to ensure that it is recorded properly. And the best part of all of this hard work is that it is always a win-win situation for everyone involved with Mainspring.”

Rachel: “I have also worked and volunteered for a myriad of nonprofit organizations, and always knew this is the sector I wanted to work in, so I can relate to Teresa in that I presumed that stepping into this role would not be too challenging. I think my biggest challenge is that I arrived at a very busy time when I began in July. It was necessary to dive in and assist where needed. However, I think I’ve actually been able to gain a deeper comprehension about the different parts of Mainspring through this approach.”



Goodbye with Gratitude



In January 2020, Mainspring Finance Manager Ramelle Smith took a medical leave of absence to care for her husband, Mike, who had been diagnosed with pancreatic cancer. When he passed away on June 16, Ramelle decided to devote her full attention to Turkey Creek Campground, the business that she and Mike owned and operated together for 34 years.

For more than 12 years, Ramelle helped advance the mission of Mainspring Conservation Trust. As finance manager, she came on board managing a budget of \$600,000, but, over the years, her job evolved to complex financials of more than \$1.2 million, receiving clean audits her entire tenure.

Without a proper sendoff from the many staff, board, volunteers and donors she worked with over the years, Ramelle was asked to write a reflection and farewell below. We wish her only the best, and know that she will continue to champion Mainspring's mission in her next phase of life.

HOW DO YOU SAY GOODBYE?
Goodbye to 12-plus years of being part of the team that made Mainspring Conservation Trust the amazing regional organization it is today. Goodbye to the dedicated team of staff, board members and volunteers who do incredible work day in and day out to save the lands

Cowee Mound Overlook — all the beautiful spaces Mainspring folks have saved.

This year didn't quite turn out like I had planned. My husband and I were prepping for my future retirement, but other plans came along. Rather than training someone to be the new finance manager and taking on a different role at Mainspring, I now have a full-time gig helping people get outside in far western North Carolina as guests at Turkey Creek Campground. I'm doing my best to take the skills I brought with me to Mainspring to ensure people have a safe experience while camping during life with COVID-19.

I still care deeply about the great outdoors and know so much more than I did before, thanks to my colleagues. I understand how important it is to conserve those places we love. The pandemic changed how we all could have gathered, so this will serve as my goodbye. I am so grateful to everyone: staff, board, volunteers and donors for all that you do to be such great stewards of the Southern Blue Ridge. I know you'll continue to go out and do good work!



Ramelle sits with staff circa 2009.

we love. How do you say goodbye to the nitty-gritty grind and minutia of detail that it takes to save those lands we love? Goodbye to the wondrous 45-minute commute to work and spotting so much wildlife through the Needmore tract, all along the Little Tennessee River, the



MOLLY PHILLIPS
Communications Coordinator

WHILE PREPPING FOR THIS LAND Steward, I brought my 10- and 13-year old children with me to the Rabun County property that was gifted to us from the estate of Maude Bivins (see page 8). While I explored the structures, Kate and Eli took our dogs and headed to Betty's Creek to cool off in the September sun. It wasn't long before I heard splashing, squeals of delight, and laughter echoing across the valley. When I was ready to go, they both begged for more time to play — a request I was happy to indulge.

While I sat on Maude's creekside bench and watched them having fun, I was reminded of the promise Maude's friend Jinny had written in 1980 — quoted on this page — as she made plans to purchase this property. Jinny had no children of her own, yet her words are similar to a promise I have often made as a parent. Our thoughts are 40 years apart, but both are about future generations and understanding the value of this region: Jinny wanted to protect beauty, and I want to make sure my kids take time to experience and appreciate what surrounds them each day.

We are lucky. We live in one of the most beautiful places in the world. A place filled with diverse

The Last Word



habitat, good weather, and plenty of space to explore outdoors. It was that way in 1850, 1980 and 2020.

I want it to be that way in 2080, as well.

I want my children, and their children's children, to appreciate what natural wonders surround them.

I want them to care about clean water and open spaces.

I want them to grow up and support conservation, and to one day write the kind of words that Jinny wrote 30-plus years before they were born — "the way is beauty."

Not all of us have the opportunity to purchase a historic property and conserve it for generations. Still, we *do* have the opportunity to make the most of our time on this earth — to enjoy its beauty and take action in caring for it for the sake of others.

I pledge to do my part — for my children, grandchildren, and the future generations I do not know.

Will you?

"It is painful to consider that the property (Hopper House) could fall into the hands of opportunists, and as long as I could help assure that not happening, I would certainly want to make every effort to prevent (the development of) it — the way is beauty."

— Jinny Jones, 1980



MAINSRING

CONSERVATION TRUST

Stewards of the Southern Blue Ridge

P.O. Box 1148, Franklin, NC 28744

Conserving the waters, forests, farms and heritage of the Upper Little Tennessee and Hiwassee river valleys in western North Carolina and northern Georgia.



♻️ Printed on recycled paper

Non-Profit Org.
U.S. Postage
PAID
Permit #593
Asheville, NC

For her. For the future.

The next generation should inherit the vital resources of this region: clean water, healthy forests and productive farmland.

Your gift to Mainspring makes a lasting impact on our ability to protect treasured places forever. Give today using the enclosed envelope or online at mainspringconserves.org.