

FALL/WINTER NEWS 2022

Central & Western New York Update



SPECIAL EDITION ISSUE: THE APPALACHIANS

Conserving Lands and Waters
Managing for Resilience
Natural Climate Solutions

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Protecting Communities, Climate and Connectivity in the Appalachians



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Dear Supporter,

Rarely do we have an opportunity to be a part of a vision so big, broad and bold that promises to conserve, restore and transform lands and waters on a continental scale. We have that once-in-a-generation opportunity right now, right here in New York—as we do our part to conserve the vast and magnificent Appalachian range.

This ancient chain of forested mountains, valleys, wetlands and rivers spans 2,000 miles from Alabama to Canada, running right through New York. Home to an incredibly rich variety of wildlife, the Appalachians—alongside the Amazon rainforest, Kenyan grasslands and tropical forests of Borneo—are considered one of the most important places on earth to harness the ability of forests and nature to capture vast amounts of carbon and transition historic fossil fuel-producing regions to renewable green energy. Through a human-centered approach, we focus on climate and conservation solutions with the greatest potential, while engaging with people and local communities to center their priorities and expertise.

But, at present, only a quarter of this globally important landscape is protected. This abundant mosaic of lands and waters, and all who depend upon it, needs our engagement. Urban development, mining, agriculture, unsustainable forestry and fragmentation caused by dams and roads interrupting streams and rivers put the region's public, economic and ecological health at risk. Climate change further exacerbates these issues, as rising temperatures and extreme weather events alter and destroy communities and wildlife habitats, causing plants and animals to shift their ranges northward and to higher elevations.

To conserve the verdant forests, rich lands and plentiful Appalachian waters that are vital to our health and quality of life, The Nature Conservancy has an inspiring and ambitious plan that you'll read about in this issue. By addressing climate change, safeguarding connected networks of land and water and promoting the well-being of local communities, our thoughtful and balanced approach meets the needs of residents and businesses, provides abundant recreational opportunities for millions of people and ensures diverse and thriving populations of wildlife. We will secure conservation outcomes that equitably benefit all who live in and rely on the Appalachians by:

- Ensuring a connected network of climate-resilient lands, corridors and waters at the pace and scale necessary to mitigate climate change and protect wildlife.
- Providing natural climate solutions like sustainable timber harvesting that protects carbon-absorbing forests for healthy communities and resilient landscapes.
- Working with local communities to transition to thriving economies that are built on green energy, tourism and recreation and sustainable resource management.
- Aiding the capacity of local conservation organizations, Tribes and residents to help conserve high-priority lands and waters.

We've done great things in New York with your support—and we can do even more with your continued help. Protecting the magnificent Appalachian region ensures that future generations can enjoy and reap the same benefits we do. The timing couldn't be more urgent. Please join us.

Bill Ulfelder
Executive Director
The Nature Conservancy in New York

Conserving a Network of Resilient Lands and Waters

Dusk falls slowly in the Appalachian valley. Commuters rush along a busy highway. But drivers are not the only ones returning home. In the twilight, beneath the road, fish follow uninterrupted streams. A mother deer and her fawn pick their way softly through the grass. Even a bobcat slinks silently along. Thanks to the wildlife underpass below the highway, most will get home safely.

Just as people have neighborhoods linked by roads, so, too, do wildlife. Animals depend on “natural highways” that connect them to other places, and these routes are increasingly important as our climate changes.

The Nature Conservancy is constructing safe wildlife passes in busy corridors along the Appalachian region to preserve these natural paths. They allow animals to go under the roads, not over them. In the short term, these passes keep wildlife away from traffic and help prevent collisions. In the long term, they represent a low-cost part of TNC’s strategy to create a system of climate-resilient Appalachian lands and waters.

We aim to create a robust network of Appalachian lands by preserving intact forests and improving connectivity between

habitats—as animals across the eastern United States have begun to move northeast to evade rising temperatures. Natural habitat links allow wildlife to find shelter in new places.

In addition to providing safe places for nature to thrive, this vast network of lands offers important benefits to people, including clean drinking water, economic income and vital carbon storage that fights climate change.

TNC is scaling up with partners to accelerate the pace and scale of land protection in the most critical areas. In particular, we are creating connectivity through our Land Trust Assist Program. This program has ensured the protection of nearly 5,000 acres so far, and we’re tripling our investment in the coming years to support projects that promote sustainable economic development, engage new or nontraditional partners or benefit vulnerable communities.

People and nature thrive when we work together. Preserving intact forests, building wildlife underpasses and saving crucial connections in the Appalachians will benefit all of us who call this land home.



The Appalachian Mountains are one of four key priority areas whose protection can help meet our goal of conserving 30 percent of lands and waters by 2030. However, we still have work to do: so far, only 19 percent of New York’s Appalachians are protected—leaving local wildlife species, like this bobcat, vulnerable.
© Jeff Wendorff

Managing for Resilience: Our Own and Our Partners'

The Nature Conservancy is ensuring that lands and waters across New York are managed for maximum resilience—meaning that as temperatures and waters rise, our landscapes, wildlife and communities will be able to adapt and thrive.

We're partnering with municipalities in the Hudson Valley, Catskills, Adirondacks and Long Island to restore natural habitat and to help people and nature adapt to climate change. Along the lower Hudson River in the Village of Piermont, rising sea levels threaten residential housing and a historic district. We are working to protect flood-absorbing wetlands and help residents in floodprone areas voluntarily move to higher ground.

On Long Island, conventional septic systems and cesspools have long released contaminants into our water, threatening communities and wildlife habitat. We are collaborating with partners to reduce pollution on our coasts and improve water quality.

Invasive Species in New York

As New Yorkers famously sing, if you can make it here, you can make it anywhere. Unfortunately, this holds true for invasive pests. New York's identity as a cultural and economic center also renders our state uniquely susceptible to non-native flora and fauna. Invasive species can devastate natural areas and exacerbate the effects of climate change.

"New York is where invasives get a toehold first in the United States, because we're a shipping hub, and they radiate out from there," says Dirk Bryant, director of New York Lands Priority at The Nature Conservancy. "Invasives weaken our natural lands, which has a huge impact on our forests' ability to store carbon."

Here are the two biggest local threats we're tackling:



© David Cappaert, Bugwood.org

Emerald ash borer:

This jade-green beetle from Asia could destroy enough ash trees to strike out America's most popular pastime. Without sustained prevention efforts led by The Nature Conservancy, iconic baseball bats made from white ash could soon become memorabilia of the past.

Round goby: Found in the Hudson River in 2021, this invasive fish from Europe preys on native species, damages habitat and hurts local economies. New York's canal system gives it and other invasive fish a direct route to Appalachian waters like Lake Champlain. We are leading efforts to keep a single lock closed in the Champlain canal to stop the round goby from causing irreversible harm to the lake and all who rely on it.



© kostik2photo



The best approach for carbon sequestration and storage is to protect, manage and restore forestland. © Mathew Levine

Natural Climate Solutions

We can help nature thrive in the Appalachians by utilizing nature itself. Healthy forests, wetlands and other natural systems have enormous potential to absorb and store carbon. In fact, our ecosystems do it naturally. However, our forests face numerous threats, and without conservation, these carbon sinks will disappear.

“We need clean energy to slow climate change, and we also need healthy natural systems,” says Michelle Brown, The Nature Conservancy’s senior conservation scientist in New York. “Nature is an important part of the solution because we need soil and trees to be alive and healthy so they can keep removing carbon from the air and storing it.”

“It’s a solution with multiple benefits: biodiversity conservation, clean air, clean water, mental health,” she adds. “Improving forest management and planting trees are essential for people and nature to thrive today and long into the future. Solving the climate emergency is huge and urgent. And when you think about all the other benefits, it’s just a no-brainer.”

To achieve meaningful conservation impacts, we are working to scale up current tree planting operations in New York. And in the Zoar Valley, we recently protected 612 acres of forest—the carbon-storage equivalent of pulling 16,000 cars off the road for a whole year.

Sustainable forest management will also tap the Appalachians’ vast potential to store carbon. Family landowners own 50 percent of New York’s privately owned forests. To help them sequester carbon while meeting their land-management goals, TNC partnered with the American Forest Foundation to launch the Family Forest Carbon Program. Landowners who participate in this program work with foresters to develop management plans. These plans help the landowners take advantage of new opportunities, handle setbacks and make informed decisions about their woods.

“The program can help keep their forest healthy and resilient over the long term,” says Chris Zimmerman, TNC’s New York forest restoration lead. “And by protecting and improving the health of New York forests, they can keep removing carbon from the air naturally.”

As the program expands throughout the state, it’s important to make sure all have access to it. “We are trying to reduce barriers so any interested landowner can have access to the program,” Zimmerman says.

The climate crisis is complex, but we have the answers. By conserving and restoring the Appalachians, we can enhance the power of our natural systems to help create a vibrant future.

Giving Nature a Chance: An Interview with Dr. Marci Bortman



© Max Strieb

We sat down with the Conservancy's long-tenured coastal scientist, Dr. Marci Bortman, who recently assumed the role of New York's director of conservation and science, for her perspective and aspirations for her new post.

Tell us a little bit about yourself.

I've been with The Nature Conservancy for 24 years and have a degree in coastal oceanography from Stony Brook University; I like to keep one foot on land and one foot in the water.

What inspires you about the organization?

I truly believe in the mission of the Conservancy. We take a long, lasting approach to conservation with a partnership-focused lens to solve problems. We know how to work both in the political and science arena. Our efforts impact human and wildlife communities alike on a scale that no other organization can accomplish.

What do you see as New York's biggest conservation challenge?

In New York, we have an outsized role in leading on climate change mitigation, thanks in part to passage of the Climate Leadership and Community Protection Act (a bill we lobbied for). Influencing how that law gets implemented is an opportunity for us to fully participate and see to it that nature-based solutions play a strong role.

Conversely, what is our greatest opportunity?

All our work links back to climate change and that is a big opportunity for New York state. The federal government is modeling their climate plan after what New York is doing—so success in this climate moment has implications far beyond our borders. The world is watching.

What about conservation keeps you up at night?

We must take our climate problem seriously, or we're in trouble as a species. It's difficult to live in communities that are experiencing extreme flooding, drought, wildfires or record-breaking temperatures. All of this puts a strain on our natural resources, and ultimately on ourselves.

What gives you hope for the future?

We can improve our lives by addressing climate change, the biodiversity crisis, social inequity and how people are living. It's all related. And what's amazing about nature is how quickly life bounces back. Shellfish can rebound, seagrass can thrive, forest can regrow. We've seen it. We've done it. We just have to give nature a chance. If we continue to think of ourselves as one big team, we can make stronger connections and leverage our work to add up to something bigger. And that's a game changer.

By the Numbers

Fall casts a spell in New York's Appalachian Mountains, turning the air crisp and tossing a kaleidoscope of color across the landscape. With your support, The Nature Conservancy in New York is protecting this timeless experience for all to enjoy. The Appalachians are one of the most globally important focal places for conserving biodiversity and tackling climate change. Thank you for your incredible partnership in conserving this rich landscape for our climate-resilient future.

2,000

miles of forested mountains, wetlands, valleys and rivers are in the Appalachians, spanning the land from Alabama to Canada

16,000

years ago Indigenous Peoples—including the Cherokee, Haudenosaunee, Powhatan and Shawnee—began stewarding the Appalachians

34%

of the United States is covered in a resilient and connected network of lands that allows species to travel from one area to another

56%

of the eastern United States' carbon is stored in the Appalachian Mountain range

253,000

acres were protected in the Cumberland Forest of Virginia, Tennessee and Kentucky

64

threatened bird species use the Appalachians as a critical migration corridor

30x30

is TNC's goal to conserve 30% of our nation's lands and waters by 2030

250,000

rare species populations are contained in this network of lands

80,000

rare species are found in the Appalachians

19%

of the New York Appalachian corridor is currently protected

26%

of the Appalachian landscape is currently conserved

70%

is the portion of New York forests that are privately owned



11

miles north, 36 feet higher is how far animals and plants move per decade to adapt to warming temperatures

35,000

native saplings were planted in the Tug Hill Plateau to study forests in a changing climate



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CLIMATE, COMMUNITY AND CONNECTIVITY IN THE APPALACHIANS

New York's lands and waters anchor the larger Appalachian Range, a globally important network of mountains and valleys stretching from Alabama to Canada. This landscape supports diverse species and water sources for millions of people. With our partners, we are safeguarding habitat bridges between New York and neighboring states so that wildlife have a connected network to move through and can adapt to climate change.

Read more about our efforts to protect this special place—one of the most resilient and biologically rich landscapes in the world.