



The Highlands Voice

Since 1967, The Monthly Publication of the West Virginia Highlands Conservancy

Volume 5 No. 1 January, 2022

Corridor H: Whose Highway?

By Hugh Rogers

An elected official in Tucker County asked me where I was from. “Randolph County,” I said. “Kerens.” “Off the mountain,” she said. I nodded. Then she told me she’d heard that opposition to Corridor H, beginning years ago, was all from “out of state people.” After letting this sink in, she said, “We think local people should make the decision.”

To a large extent, I agreed. So far, the decisions have been made in Charleston. Highway engineers have calculated volumes of earth to be moved, length in miles, and cost; they have determined environmental constraints such as wetlands, streams, and wildlife habitat. What they have not calculated is the likely impact on local people’s lives.

In the 90’s, acquiescence in their decisions seemed the

only way to get the corridor built. But the game has changed, in two ways. First, under a court-approved settlement agreement, the highway will be done but the question remains where. Second, as a result of the bipartisan infrastructure bill, the money is available now. If local people are to make a decision, it must come soon.

Until a month ago, construction on the Parsons-to-Davis section was set to begin in 2031. That date has been moved up to 2024.

Completing a final environmental impact statement, producing a final design, and acquiring right-of-way, which were supposed to take eight or nine years, have been collapsed into two.

Unaccounted for in that timetable is a possible delay. It has to

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Thoughts from our President

By Larry Thomas

Another incredibly challenging year has come to an end. Looking back, I have been thinking, where did it go, seems to have just zoomed by. Unfortunately, the Covid19 pandemic, now with even another variant, continues its successful quest to radically change the way we live our lives.

The Conservancy's many accomplishments, as well as many informative articles, have been recounted in each month's issue of *The Highlands Voice*. I hope that you have had the opportunity to read each monthly issue from front to back. It is evident that we did not allow the pandemic to slow us down in our mission to work for the conservation, appreciation, and ecologic integrity of the natural mountain landscape of West Virginia.

We realize that the Conservancy's success has been made possible by the 54+ years of continued support from our loyal members and supporters, and for that we are most appreciative. Thanks to that wonderful support, we have been able to continue the long-successful programs such as holding industry responsible by restraining out-of-control mountaintop coal mining, Marcellus Shale drilling, mega gas Pipelines and working to reduce their impacts, protection of our public lands and Wilderness Areas, restoring the red spruce eco-system, protecting clean water, review and reporting on issues related to climate change and engaging State and Federal lawmakers.

That continued support also allows us to tackle new problems as they arise such as the conditions that have surfaced with the Dolly Sods Wilderness and the proposed use of Off-Road Vehicles on West Virginia public lands. The list continues to grow and grow.

While the issues might be different from year to year, our methods remain fundamental. With member and supporter support, we are able to expose problems, educate members, the public, and policy makers, research better alternatives, and use our collective Voice. Our historic record of successes, and our vision for the future, reinforce our efforts on behalf of what we all have grown to love, respect and appreciate.

West Virginia 2021 Legislative Session Begins January 18, 2022

We are fast approaching the 2022 legislative session. West Virginia Environmental Council (WVEC) has been in preparation mode reviewing the pre legislative session interims and working with coalition partners. Starting January 21, WVEC will send out "Green Legislative Updates" each Friday to keep everyone informed. They also expect to send along more frequent action alerts on issues requiring immediate action. Calling and emailing your legislators concerning important issues will be the best way to reach them this session.

There is a lot to tackle this year. Topping the list from member groups received as responses to a member survey taken last fall were water quality, climate change, and clean elections (changing the political rules that favor special interests and giving regular West Virginians an equal voice in our government).

Specifically, the focus will be on the following priorities:

- Climate Change
- Clean water including a strong water quality standards rule
- Clean Elections and protecting our voting rights

- Public Lands threatened with Off-Road vehicle use
- Coal Community/Just Transition for West Virginia communities
- Adequate funding for inspectors for the Office of Oil and Gas of the DEP

Every year as legislation is introduced, there are issues that arise which must be addressed. A great example was the "Logging in State Parks" legislation that was introduced four years ago. With a monumental effort, the coalition was able to convince the legislators that that was a terrible idea and the legislation stopped. I am hearing that this year it will be the allowance of motorized vehicles in certain state-owned public lands, and issue that the Conservancy has always opposed.

Additionally, WVEC expects to use a good deal of its resources to educate legislators, and to provide fact sheets and grassroots outreach on any potentially harmful legislation, as well as proactive bills.

West Virginia Highlands Conservancy is a member and supporter of WVEC.

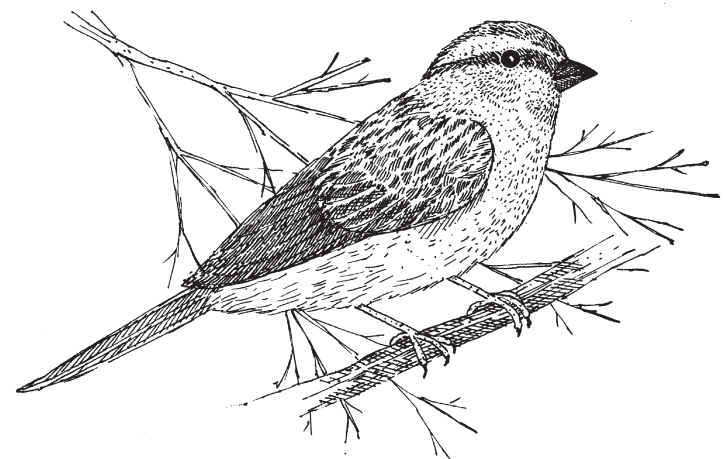
New Challenges

Thousands of individuals again flocked to our highlands during 2021 as has been the experience with all public lands throughout the country, demonstrating the importance of our continued efforts to continue the fight and to win the war against those who needlessly want to destroy the environment and destroy the natural, scenic and historic areas within the West Virginia highlands.

It is critically important that we continue to fight to preserve and protect the highlands for future generations, focusing on new and exciting opportunities. In addition, we must continue to monitor unresolved issues that we have been working on and to continue reporting on our progress in *The Highlands Voice* throughout the coming year.

Many thanks to the members of our Board of Directors and of the various committees, who despite the issues caused by the pandemic, have remained diligent in their efforts to assure our continued fulfillment of the Conservancy's mission during 2021.

As we move into the new year, I want to take this opportunity to wish everyone a safe, healthy, happy, and prosperous 2022. I am also hoping that we can get a handle on the pandemic and return to as normal lives as possible.



More about Corridor H (Continued from p. 1)

do with the same flaw that led to the Court of Appeals decision more than twenty years ago, and consequently to the settlement agreement: Where a federally-protected historic site stood in their way, the Division of Highways (DOH) simply pretended it wasn't a problem.

As described in the 2007 environmental impact statement (EIS), the agreement required the DOH "to evaluate alternatives for avoiding the 'Blackwater Area' . . . which includes historic and archaeological resources associated with coal and coke production in the Blackwater Valley."

Choosing one of those alternatives now would put the project in overdrive. Returning to the old "preferred alternative" would bring the fifteen groups who originally sued back to court. Some settlement! Last time around, judicial proceedings took four years. It's ironic that citizens' groups who used to be accused of stalling are urging the DOH to choose an alternative that could be built without delay. But who really wants to litigate?

Compare the original alternative with Alternative 1D East, the better alignment for Thomas, Davis, and the "Blackwater Area." (A Summary of Impacts by Alternative can be found in the 2007 EIS.) Their lengths are nearly the same: 9.9 miles vs. 10 miles. But the "preferred alternative" requires more earthwork, borrow and waste; it affects four and a half times more wetlands, nearly twice as much stream length, and more acres of floodplain and wildlife habitat. It is preferred because of a single factor: cost. Are we surprised that the cheaper solution is more destructive?

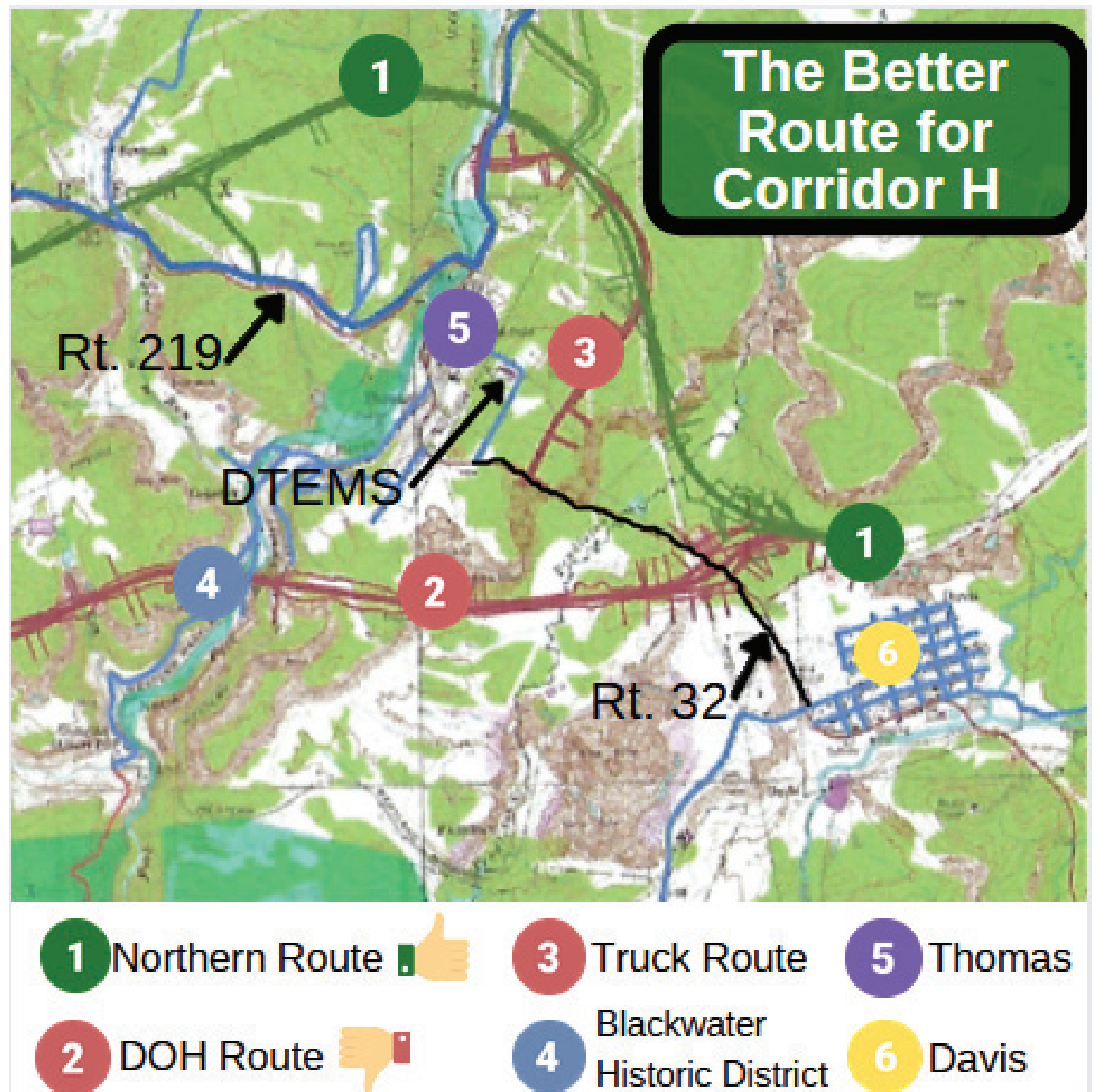
Only a cramped, unrealistic definition of cost could ignore those impacts. And what about the impacts of a major barrier between Thomas and Davis? And the visual and audible impacts to the whole Blackwater Area, its trails and views and falls and historic features?

With the infrastructure money, we can afford to do it right.

If, as the official in Tucker County told me, local people want to make the decision, they will feel confident that the northern alternative will solve the decades-old problem of truck traffic on East Avenue, Thomas's main shopping street. The DOH added a funky "truck route" to their original alternative, but it would be too steep and too close to the school and public library, and it's hard to find anyone who believes it would be built soon. A major intersection on Route 32 would send the trucks straight into town.

Local people will want assurance that the northern route will not affect the Thomas City Park trails. When that route was first designed, the trails were not complete. A slight adjustment might incorporate the current design's access to Route 219, and provide a shorter exit ramp.

A well-designed bypass will enhance the experience of the people who want to come here, while allowing those who are just passing through to avoid local traffic. It will not destroy the attractions that have helped to make these mountaintop towns an appealing destination. For local people, it will support the economy and ease their travel around the region, and it won't cut them in two.



Possible routes for Corridor H in the Davis-Thomas area.

Mountain Hydrology Lab Addresses Water Security and Climate Change

By Cory Chase

On November 12, I had the pleasure of interviewing Nicolas (Nico) Zégre, PhD, about climate change and the future of WV's water. Nicolas is an associate professor of forest hydrology and director of the West Virginia University Mountain Hydrology Laboratory (MHL). This lab "focus[es] on aspects of water resources with a particular emphasis on land surface and atmospheric processes, patterns, and trends to ultimately understand how mountain freshwater ecosystems and services respond to environmental change and climate change....In the MHL, we aim to understand how watersheds and humans interact to better understand how disturbances such as climate change, land-use/land cover change, energy development, and water use affect water access, security, justice, and equity."

We talked on Zoom and below is a recap of our conversation.

Cory: *Hi Nico, thanks so much for taking the time to talk with me today about your work with MHL. I read that your three main goals are to democratize data on water resources, quantify the impacts (and opportunities) of climate change, and to educate people to increase climate literacy. Are there any other goals for your work with MHL?*

Nicolas: Another critical goal is sharing our enthusiasm around how amazing WV is. There are two main ways to do that: explain what is amazing (not just what is wrong) in WV and describe what WV contributes to the country. Our state has a deep-seated identity to coal as powering the nation but we also provide LOTS of water directly to 3% of the population and indirectly to 10%. We are the provisioners of fresh water to so many people who live downstream. Water is a common language that connects.

We actually ARE climate zero because our coal and natural gas have global implications but also because WV is experiencing some of the greatest impacts being felt. We are ground zero...we contribute to the problem but also inherit a large part of the burden.

Cory: *How long have you been doing this work with MHL?*

Nicolas: I moved to WV in 2009 from Oregon to start this lab. I have a history in WV going back to the 1990's.

Cory: *I've read that Appalachia is projected to see the largest temperature increase in the United States. What are some unique opportunities and challenges with regards to climate change that we face here in Appalachia?*

Nicolas: There are many challenges. We often discuss climate change in terms of long-term average values of air temperature and precipitation. For example, the earth's atmosphere has warmed by 2 degrees over pre-industrial times. But there are also meaningful changes in minimum and maximum temperatures. We know from measurements that maximum temperatures in WV are not changing that much. But minimum temperatures are increasing so things like the overnight cooling temperatures are less cold.

Warmer overnight temperatures affect forest health, diseases, pests, and a host of other things. Warmer air also means more intense rainfall. As our atmosphere becomes warmer, it expands increasing how much water it can hold. Warmer temperatures increase evaporation from the land surface putting more water in to the atmosphere. This leads to more intense rainfall, flood risks, and

vulnerability. Most of WV's and the nation's infrastructure is along waterways.

As for opportunities, we should use this word lightly. The climate crisis is not stopping anytime soon and 2/3rds of the US is becoming warmer and drier while WV is becoming warmer, wetter and drier (greater variability in extremes). WV has a real opportunity to change our relationship with the nation as provisioners of fresh water downstream. Water scarcity is going to increase conflict and we may be able to be reliable providers of water to the eastern US and Midwest.

We cannot be reliable providers of water until we clean it up, protect it and enhance it. Nobody wants acid mine drainage water. You can't drink it or use it in manufacturing processes. Restoring landscapes is costly but needs to be done in order to protect our watersheds and provide a clean water to ecosystems and communities.

When we increase climate literacy in WV, we increase public discourse and opportunities for reshaping WV's future. Bottom-up solidarity and understanding among citizens. Over the last few years, public discourse around climate change, flooding, vulnerability, and resilience has increased... people want their best interests considered in decision making by our elected representatives.

Cory: *How can we increase public understanding of how climate affects our lives?*

Nicolas: We need to talk about it with our families, communities, churches, and so on. Climate change and its impacts are a shared experience. We don't need scientific models to tell us that things are changing; we can see it and feel it. We need to recognize and share our collective lived experiences since we are all experts in our lived experiences. Our elected representatives need to hear our concerns and ideas.

Cory: *How would you describe water security?*

Nicolas: Water security is the lens with which we think about how humans and the environment are inextricably linked. It considers acceptable levels of water-related risk to human and ecosystems coupled with sufficient water quantity and quality to sustain healthy life and support livelihoods. Water is required to have a vibrant and thriving economy, not just for people. Water is implicit to healthy communities, economies, and ecosystems.

Cory: *How can the public help to secure clean water?*

Nicolas: The big thing is talking about it. Ask yourself what is your relationship with water? Stop acting like climate change, flooding, and pollution are too big of problems for us to change. We need to demand our elected representatives have our best interests in mind. Don't let manufacturers and industry and special interest groups tell us what our quality of life should be.

Cory: *How does race factor into water security?*

Nicolas: Race and other social factors are very important to water security. Across the US, black, brown indigenous, and poor white

(More on the next page)

More Chatting with the Mountain Hydrology Laboratory (Continued from p. 4)

communities are disproportionately exposed to water, land, and air pollution that decrease quality of life. A person's zip code is a strong predictor of water, food, energy, and health insecurity.

Cory: *Are there actions our WVHC membership can take to help?*

Nicolas: Yes, communicate with your representatives. They need to hear from us as individuals and organizations. We need to shift our focus towards youth since they are the future and they are inheriting a less safe world. WV's change is not going to come from the current generation of voters and decision makers and from people who are entrenched in their politics, and at the whims of lobbyists or special interest groups. The future is in youth! We in the MHL, are actively focusing on co-producing, tools, and solutions with Appalachian youth. *Most important is bringing youth to the table as experts on what we can do to make a more vibrant and healthier WV. We have to democratize knowledge so we can democratize solutions.* Support youth organizing if you can. MHL has engaged with public school teachers to see what kind of tools and materials that they need for increasing environmental literacy...Our public teachers are underpaid and undervalued. We can work with them by providing educational materials that enhance climate and water literacy.

Cory: *That is a great point about youth activism. I am hoping that WVHC and other WV organizations can spend more effort on youth engagement. Nicolas, thanks so much for taking the time to talk with me today. Any closing thoughts?*

Nicolas: My pleasure, Cory. One thing that is really important for the environmental community is to focus on WV solidarity. We should not be fighting pro-coal communities but fighting the policies that promote toxic environmental practices. No single one person is the enemy and we need to collectively work to dismantle the political and industry practices that actually harm us and our opportunities.

Learn more at the MHL website: <https://www.mountainhydrology.org/>

Thank You

The West Virginia Highlands Conservancy very much appreciates the generous bequest received from the Estate of Lawrence Woodward "Luke" Franzheim, III of Springfield, Ohio, formerly of Wheeling, West Virginia.

Among Mr. Franzheim's many passions in his life was nature conservation. Above all, he embraced the spirit of "Wild and Wonderful West Virginia" and was most proud of his history and his heritage. This generous bequest will enable the Conservancy to continue their work for the conservation, appreciation, and ecological integrity of the natural mountain landscape of West Virginia. It will enable the Conservancy to expose issues, educate members and supporters, the public and policy makers. Through the use of its collective voice, historic record of successes, and vision for the future, the Conservancy will continue their efforts on behalf of what we all have grown to love, respect and appreciate.

The Conservancy extends its condolences to the family of Mr. Franzheim and hopes that cherished memories will live in their hearts forever.

Send Us a Post Card, Drop Us a Line, Stating Point Of View

Please email any poems, letters, commentaries, etc. to the VOICE editor at johnmcferrin@aol.com or by real, honest to goodness, mentioned in the United States Constitution mail to WV Highlands Conservancy, PO Box 306, Charleston, WV 25321.

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The Highlands Voice is always printed on recycled paper. Our printer uses 100% post consumer recycled paper when available.

The West Virginia Highlands Conservancy web page is www.wvhighlands.org.

The West Virginia Highlands Conservancy is a non-profit corporation which has been recognized as a tax exempt organization by the Internal Revenue Service. Its bylaws describe its purpose:

The purposes of the Conservancy shall be to promote, encourage, and work for the conservation—including both preservation and wise use—and appreciation of the natural resources of West Virginia and the Nation, and especially of the Highlands Region of West Virginia, for the cultural, social, educational, physical, health, spiritual, and economic benefit of present and future generations of West Virginians and Americans.

Senator Manchin Voices Opposition to the Build Back Better Act

By Perry Bryant

On December 19th, on Fox News of all places, Senator Manchin said that he could not support moving the Build Back Better Act forward. The Build Back Better (BBB) Act is President Biden’s proposal to expand the nation’s social safety net and make historic investments in efforts to address the climate crisis.

The BBB Act would invest \$550 billion over ten years to address climate change. A few of the important climate measures included in the House-passed version of the BBB Act, include:

- A 30% tax credit for installing solar, wind, geothermal or batteries. These tax credits are extended for up to ten years and are direct pay meaning if the tax credits are greater than the taxes you owe, you can receive a tax rebate from the IRS. This is a significant benefit to low- and moderate-income individuals who want to install renewable energy.
- A tax credit for electric vehicles (EVs) provided at the time of purchase. The EV tax credit starts at \$7,500 but increases to \$12,500 for EVs built in the United States under a collective bargaining agreement. Very high-income families do not qualify for the EV tax credit.
- \$6 billion for energy efficiency measures in existing buildings. Depending on how much energy is saved, these tax credits would range from \$2,000 to \$4,000.
- \$6 billion for “qualifying electrification projects” such as installing an electric heat pump. The tax credit for installing a heat pump would be \$1,250 to \$4,000 depending on how efficient the heat pump is.
- Establishing the Climate Conservation Corp. The new CCC “could hire hundreds of thousands young people to restore forests and wetlands and guard against the effects of rising global temperatures”, according to the Washington Post.

These tax credits in the BBB Act are impressive and could, if adopted, help reduce America’s greenhouse gas emissions. The UN Intergovernmental Panel on Climate Change (IPCC) has determined that global warming needs to be kept below an increase of 1.5 degrees Celsius relative to pre-industrial levels in order for the planet to avoid the worst impacts of climate change. In order to stay within this 1.5-degree goal, countries need to reduce their greenhouse gas emissions, on average, by 45% by 2030 and reach net zero by 2050. President Biden has proposed that the US reduce its emissions by 50 to 52% by 2030 and reach net zero by 2050.

In an evenly divided Senate with all Republican Senators opposed to passage of the BBB Act, Senator Manchin’s support is essential. Without his support the fate of the BBB Act is uncertain. But it’s important to understand that even with the adoption of the extensive tax credits in the BBB Act, the US is unlikely to reach the goals established by the IPCC or the Biden Administration. That is the findings of the World Resources Institute (WRI), a global research organization. The WRI report is the first that I have seen translating various climate mitigation measures into projections on national greenhouse gas emissions. Hopefully, additional reports in the near future will either confirm or refute the WRI findings.

The WRI chart below shows that under existing policies plus the Bipartisan Infrastructure Framework, which passed Congress and was signed into law by President Biden earlier this fall, the US is projected to achieve only a 39% reduction in greenhouse gas emissions by 2030. Even with the adoption of the BBB Act, the US would reduce greenhouse gas emissions by only 43% by 2030 and only 63% by 2050.

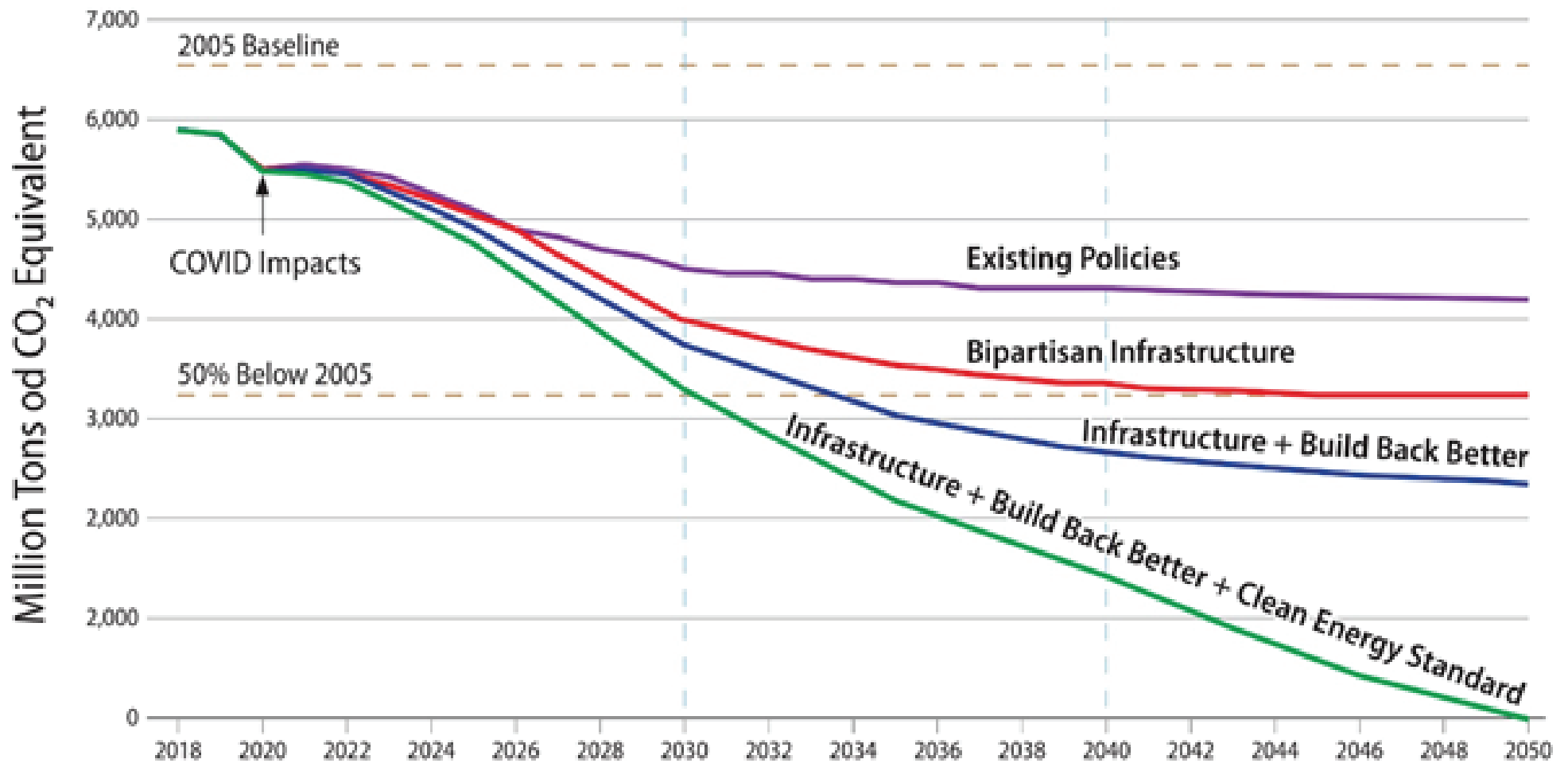
In order to achieve President Biden’s goal of a 50 to 52% reduction by 2030 and net zero by 2050, the US needs to implement the Bipartisan Infrastructure Framework, adopt the BBB Act and adopt clean energy standards along with several other reform measures, according to the WRI.

Reform Measures	% Reduction by 2030	% Reduction by 2050
Existing Policies	31%	34%
Add Bipartisan Infrastructure Framework	39%	50%
Add BBB Act	43%	63%
Add Clean Energy Standards	50%	100%

The BBB Act did contain a clean energy standard. It was called the Clean Electricity Performance Program and would have provided utility companies with financial assistance for increasing the percentage of energy they generate with clean energy sources by 4% annually, and penalizing utility companies that failed to meet the 4% threshold. This clean energy standard was removed from the BBB Act at the insistence of Senator Manchin.

What does all this mean? First, the BBB Act is important to reducing greenhouse gas emissions, and should be adopted. Second, the US will likely need additional policies beyond the BBB Act that further reduces greenhouse gas emissions in order to avoid the worst impacts of climate change. This could be achieved with additional legislative initiatives. Or it could be achieved through technology breakthroughs such as the remarkable reduction in the cost of solar over the last decade. Or the public will need adopt personal responsibility measures significantly conserving energy. The gap between where we are projected to be in 2050 even with the adoption of the BBB Act and where we need to be to avoid the worst impacts of climate change is significant as the WRI graph on the next page highlights.

Climate Reform Measures and Reductions in Greenhouse Gas Emissions



Source: World Resources Institute

WV E-DAY 2022

When: Thursday, January 20 from 10 a.m. - 2 p.m.

Where: WV State Capitol, Upper Rotunda on the Senate side

What: Meet with environmental advocates from across the state & get an update on what's happening at the Capitol!

Plus, join us at the Red Carpet afterwards for a fun celebration with live music! More info to come.

Supporting the Wilderness Climate:

The First Season of Dolly Sods Wilderness Stewards

Part 2: Dolly Sods Becomes a Wilderness

By Dave Johnston

In the first part of this article (*The Highlands Voice*, December, 2081), which is based on the presentation I made at the WVHC Fall Review, we looked at the provisions of the Wilderness Act of 1964 as they relate to the values of “wilderness character”, and how they are applied to the Dolly Sods Wilderness. In this second part I want to look at how the Dolly Sods Wilderness was officially created under those principles, and start looking at how wilderness designation has protected Dolly Sods. In a future article I’ll discuss the current threats to the wilderness character of Dolly Sods, how the Dolly Sods Wilderness Stewards responded to those threats, what we have learned from our first season, and what is planned for the future.

The Origin of Dolly Sods Wilderness

West Virginia is fortunate to have eight congressionally-designated wilderness areas. But it almost didn’t come to be. After the original Wilderness Act was passed in 1964, a philosophy began to take hold that only “pristine” natural areas, that had not experienced the effects of human activity, should be eligible for wilderness designation. As we have seen, there is nothing in the Wilderness Act to support this, and it in fact mentions historical significance as a basis for wilderness character. Nevertheless, proponents of this “purity policy”, notably the US Forest Service, contended that this meant that essentially no areas in the eastern US could be considered for wilderness.

Fortunately this philosophy was decidedly repudiated when Congress passed the Eastern Wilderness Act in 1974. This designated 16 new wilderness areas in the east, including Dolly Sods and Otter Creek.

The successful designation of these first two wildernesses in West Virginia was due in no small part of the efforts of WVHC, then a fledgling organization just starting to take on big issues. You can read in great detail about the many twists and turns it took to realize this outcome in *Fighting to Protect the Highlands*, the history of the first 40 years of WVHC, available in the website Store.

A key part of this was the development of a “Wilderness Proposal and Hiking Guide” for both Dolly Sods and Otter Creek by Helen McGinnis and Bruce Sundquist, published by WVHC in 1969. The proposal contains a detailed analysis of the history of Dolly Sods and how that and its inherent natural features made it a prime candidate for wilderness designation. The proposal uncannily anticipates and addresses the objections that would be raised and outlines the threats to it should it not be protected. The proposed boundaries of the wilderness almost exactly match the area that was actually designated several years later.

Bruce Sundquist has passed on, but Helen McGinnis is still an active WVHC member. She graciously provided me with a copy of the 1971 edition of the *Proposal and Guide*, which you can now download in scanned PDF form from the WVHC website at <https://bit.ly/3JeD4b9>. The perspective this provides on the background and rationale for Dolly Sods Wilderness is fascinating, and much of it is relevant and instructive even today. I’d encourage you to read it.

The original Dolly Sods Wilderness included the lower part of the Red Creek drainage above Laneville, but not the upper watershed

to the north, which remained in private hands. Given the importance of the watershed to the health of the wilderness, protecting this land was a high priority. In 1973 The Nature Conservancy purchased most of the watershed and donated it to Monongahela National Forest. This land, which became known as Dolly Sods North, was added to the Dolly Sods Scenic Area, but was not yet wilderness.

In the 2000s another push was made to increase the amount of wilderness set aside, especially in the eastern US. Again WVHC played an active role in this, this time spearheaded by Dave Saville. This culminated in 2009 with congressional action to expand Dolly Sods Wilderness to include Dolly Sods North, as well as designation of a new wilderness in Roaring Plains, just to the south of Dolly Sods.

However, one piece of the puzzle remains missing even today. The last remaining significant part of the Red Creek watershed, Dobbin Slashings Bog, a 1200 acre wetland and surrounding slopes which is the source of Red Creek, remains on private property adjacent to the northwest edge of Dolly Sods. Anything that happens in Dobbin Slashings affects the wilderness downstream. The potential for development of that area or of other human interventions affecting the natural processes of the ecosystem are a present threat to the wilderness character of Dolly Sods.

The Value of Dolly Sods Wilderness

The designation of Dolly Sods as wilderness avoided or mitigated several potential threats. The Forest Service had already established a “Dolly Sods Scenic Area”, but this did not protect it from all forms of human intervention. As the forests recovered from the clearcutting and bombing, more areas would produce marketable timber. There were already two timber sales within the Scenic Area that were slated for cutting, which were rendered moot by the wilderness designation.

Marginally valuable coal exists under Dolly Sods, part of the same formation that was mined in the Stony River area just north of Dolly Sods. As development (both actual and proposed) increased in the surrounding area, it would become more economically viable to extract that coal. The Scenic Area designation would probably have prevented surface mining, but deep mining would have been a possibility. Purchase of the mineral rights by The Nature Conservancy and inclusion of them in the wilderness package headed off that potential threat.

At the time the Davis Power Project, which would have flooded Dobbin Slashings as well as a large part of Canaan Valley, was just being proposed. Although it took decades for the project to finally be abandoned, the potential impact on a wilderness downstream complicated the planning for this and contributed to its demise.

Two major parkways had been proposed to pass through the area, and proposed routing took them through or on the edge of the Dolly Sods. The wilderness designation helped prevent the impact of traffic, roadside development, and disturbance of natural patterns of vegetation, wildlife and water that would have accompanied such development.

(More on the next page)

More about Dolly Sods (Continued from previous page)

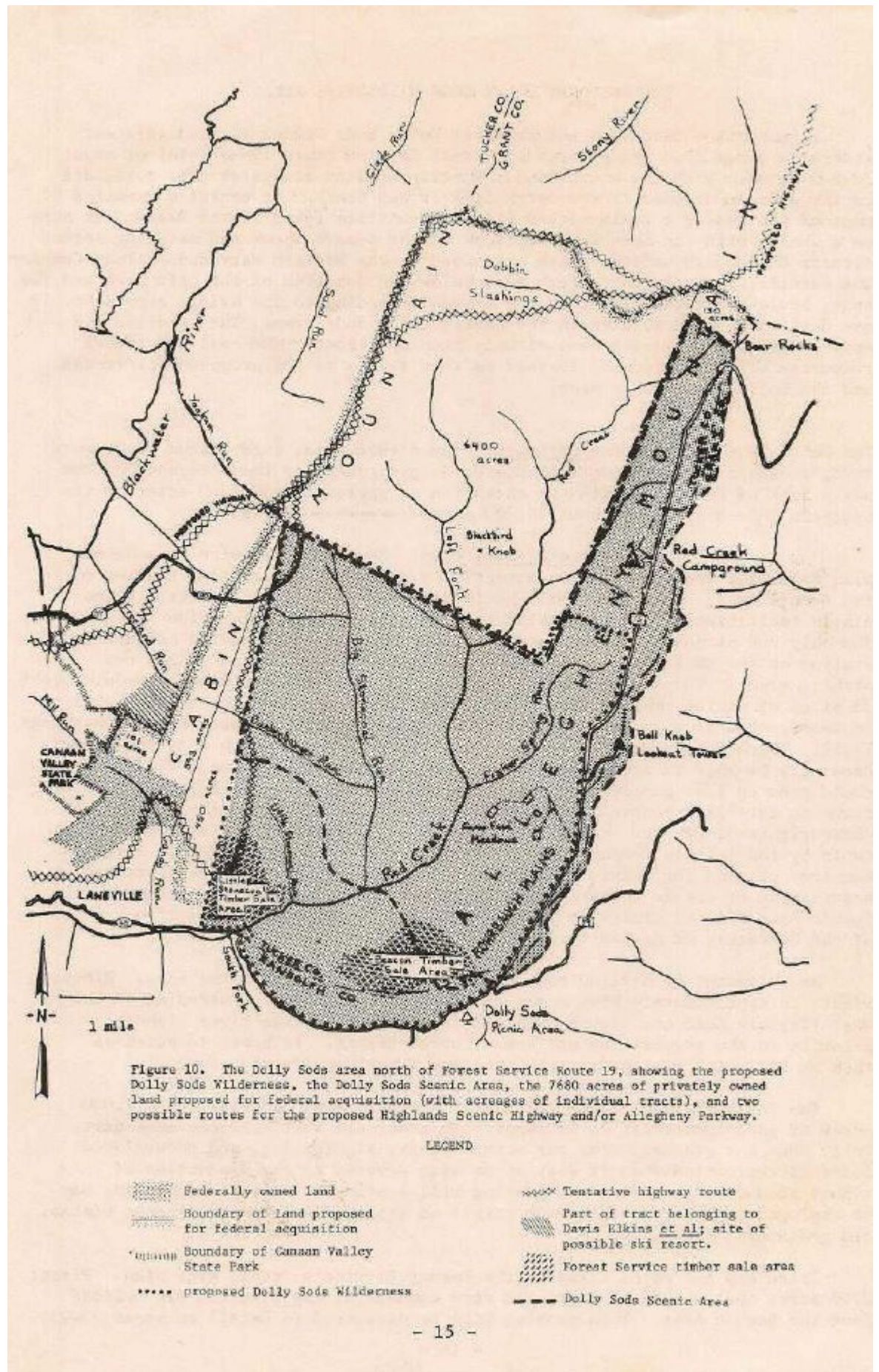
Even well-intentioned but potentially disruptive human interventions were limited and subject to more scrutiny. Attempts at reforestation through planting of spruce and, in some cases, non-indigenous species were halted in favor of allowing natural regeneration. Attempts to counteract ongoing human impacts, including acid rain deposition, would need to be examined and such “trammeling” justified as a minimum requirement to maintain natural conditions.

Designation of Dolly Sods as a wilderness helped establish a precedent for the viability of eastern wilderness in areas that are relatively small, on previously-disturbed land, and subject to pressures for development and other impacts within and surrounding the natural area. In many ways Dolly Sods serves as a laboratory for understanding how the advance of civilization can be balanced against the need – for both humans and natural inhabitants – for preservation of refuges where human manipulations are minimized and an experience of wilderness character can be pursued.

But...having overcome the “old school” challenges of extractive industry and intrusive development, Dolly Sods is now faced with new challenges of the modern world, some of which are the direct consequences of its own success. In the next installment we will examine those and how we as conservationists can respond to them.

Meanwhile, to learn more about the Dolly Sods Wilderness Stewards and to join up, go to <https://bit.ly/3pBjiyV>.

Note: For a related story, go to p. 18.



Carbon Capture and Storage Is Not a Silver Bullet, But...

By Perry Bryant

I enjoyed reading Dr. Pokladnik’s well-written article on carbon capture and storage in December’s *Highlands Voice*. I agree with her overall position that carbon capture and storage is not a silver bullet. However, I disagree with her conclusion that carbon capture and storage “is just a fossil-fuel distraction that is wasting time and tax payer money.”

Carbon capture and storage is taking carbon out of the flue gases at coal or natural gas power plants or other industrial sources and storing the carbon deep underground.

Despite the problems with carbon capture and storage (it’s currently uneconomical on an industrial level among other problems), I support continued research and development into carbon capture and storage.

Why? Several reasons, including the fact that many leading scientists believe that it is an important technology in preventing global warming from exceeding 1.5 degrees Celsius above pre-industrial levels. Both the UN Intergovernmental Panel on Climate Change, comprised of the world’s climate scientist, and the International Energy Agency, the world’s experts on energy, included carbon capture and storage when they developed their pathway to holding global warming below 1.5 degrees Celsius. Some proponents of carbon capture took these inclusions to be an endorsement of carbon capture and storage. It is not an explicit endorsement, but is, in my opinion, an implicit endorsement.

The National Acadamies of Sciences, Engineering and Medicine in their report, *Accelerating Decarbonization of the U.S. Energy System*, didn’t just include an implicit endorsement of carbon capture and storage; but rather offered a full-throated endorsement of this technology.

So, when the world’s climate scientist, the world’s energy experts, and some the nation’s leading scientists concluded either implicitly or explicitly that carbon capture and storage is needed to keep global warming below an increase of 1.5 degrees Celsius, I take notice, and support their conclusions unless there’s a compelling reason not to.

Second, some industries are going to be very difficult to decarbonize, particularly steel and cement, two of the most versatile building materials. Europe is exploring the development of green steel, although it’s not commercially available yet. No one, at least to my knowledge, has figured out a means of creating cement without also producing a lot of carbon dioxide. Carbon capture and storage may well be the best technology to keep carbon dioxide out of the atmosphere when producing steel and cement.

Third, no one in the U.S. is planning on building new coal-fired power plants. Regretfully, that is not true for China. And the plants that they are building today will be around for 50 years or so. If the U.S. can successfully develop carbon capture and storage technology, we may be able to export this technology to China and reverse some of their reckless emissions of carbon dioxide.

Finally, there is a sister technology that may benefit from breakthroughs in carbon capture and storage technology. Direct air capture takes carbon out of the ambient air (not from flue gases) and stores it deep underground. The world already has too much carbon dioxide in the atmosphere. Along with planting trees and preserving old growth forests, we are likely to need direct air capture technology to reduce the concentrations of carbon dioxide already

in the atmosphere. Breakthrough developments in carbon capture and storage could benefit the development of direct air capture.

Like so much with climate change, the decision on whether to continue to support Research & Development into carbon capture and storage is not an easy choice. Along with whether to support R&D for advanced nuclear reactors (a carbon-free, base-load source of energy), support for carbon capture and storage is one of the most difficult issues in shaping climate change solutions. To use a basketball metaphor, these decisions are jump balls, and could go either way.

Keeping global warming below an increase of 1.5 degrees Celsius will require fundamental changes in how we produce and use energy. The transition from fossil fuels to clean energy is going to be the most difficult transition humankind has ever undertaken. This is going to be hard, very hard. We need, in my opinion, ever arrow possible in our quiver. We cannot afford to discard technologies that we may find essential in the future as we begin in earnest this monumental challenge.

Theodore Roosevelt and Climate Change

On April 15, 1907, President Theodore Roosevelt, issued an “Arbor Day Proclamation to the School Children of the United States,” telling them:

It is well that you should celebrate your Arbor Day thoughtfully, for within your lifetimes the Nation’s need of trees will become serious. We of an older generation can get along with what we have, though with growing hardship; but in your full manhood and womanhood you will want what nature once so bountifully supplied and man so thoughtlessly destroyed.

Leave a Legacy of Hope for the Future

Remember the Highlands Conservancy in your will. Plan now to provide a wild and wonderful future for your children and future generations. Bequests keep our organization strong and will allow your voice to continue to be heard. Your thoughtful planning now will allow us to continue our work to protect wilderness, wildlife, clean air and water and our way of life.

Join Now !!!

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Patron	\$250	\$500	\$500
Mountaineer	\$500	\$750	\$1000

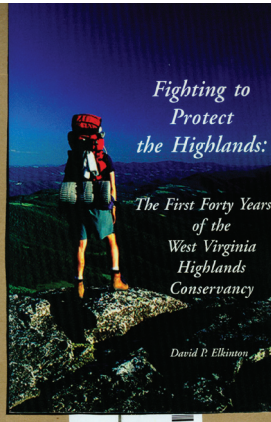
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West Virginia Highlands Conservancy
Working to Keep West Virginia Wild and Wonderful

You may also join on-line at www.wvhighlands.org

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518 pages, 6x9, color cover, published by Pocahontas Press

To order your copy for \$15.95, plus \$3.00 shipping, visit the Conservancy's website, wvhighlands.org, where payment is accepted by credit card and PayPal. Or write: WVHC, PO Box 306, Charleston, WV 25321. Proceeds support the Conservancy's ongoing environmental projects.

SUCH A DEAL!
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Although *Fighting to Protect the Highlands, the First 40 Years of the West Virginia Highlands Conservancy* normally sells for \$15.95 plus \$3.00 postage. We are offering it as a premium to new members. New members receive it free with membership.

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If you have a friend you would like to invite to join the West Virginia Highlands Conservancy just fill out this form and send it to West Virginia Highlands Conservancy, Box 306, Charleston, WV 25321.

Person you wish to refer: _____

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Your name: _____

Filling out the form, etc. is, of course, the old school way of doing things. If you prefer, just email the information to Dave Saville at WVHC50@gmail.com.

The way it works: Anyone you refer gets *The Highlands Voice* for six months. At the end of the six months, they get a letter asking if they want to join. If they join, we're happy. If not, then maybe next time.

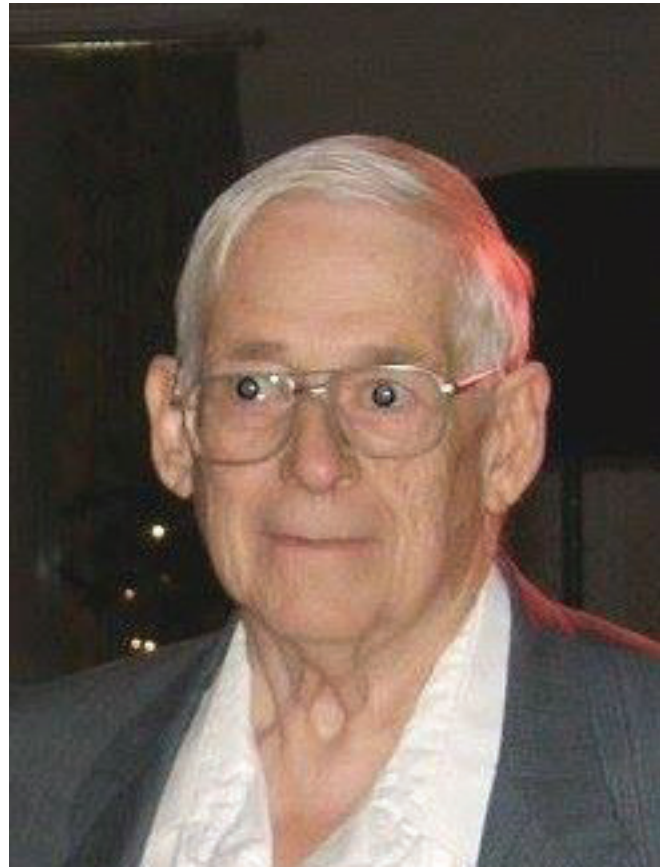
Frank Young

Franklin (Frank) D. Young of Ripley, WV, died Thursday, Dec. 2, 2021 at the Hubbard Hospice House in Charleston, WV. He was born at Tupper Creek, in Kanawha County, WV, the son of Lewis Otho Young II and Lena Mae Young.

Frank had been the owner of Red Barn Tire and Wrecker Service, near Ripley, for 23 years. He was an ardent promoter of recycling and ran the Jackson County Solid Waste Recycling Center for 27 years.

He also served as President of the West Virginia Highlands Conservancy from 1998 to 2004 and as a Board member and for over 20 years. In his younger years he had several other jobs as well. The WV Environmental Council was another interest for over 20 years. He had been a member of the Charleston area Unitarian/Universalist community for most of his adult life.

Besides his wife Rebecca (Becky) with whom he shared 54 years of marriage, he is survived by the following; three children, Raymond Young (Rhonda), David Young (Ava), all of Ripley, and Jennifer Bauer-Leer (Simon) of Portland, Oregon; eight



grandchildren who lovingly remember their Pappaw, Austin Young, Savanna Young, Cassie Fisher, Tyler Wallace, Hollie Young, and Kelsie Young, all of Ripley; Mikhaela Medina of Pennsylvania and Alexander Medina of Spokane, Washington; one great granddaughter, Autumn Fisher of Ripley, also survives. Also surviving are Frank's five siblings: Lois Daskalos, of Charleston, WV; Darwin (Gerry) Young of Lancaster, Texas; Homer Young of Douglassville, Georgia; Dawn (Pinky) Warden of Medina, Ohio; and Karolyn (Kay) Hill of Mineral Wells, WV. In addition to his siblings and their extended families, he is survived by the family's special friend Michelle Medina of Pennsylvania and his bow-legged canine friend, Bumper, of Ripley.

He was preceded in death by one infant brother, Lewis O. Young II. His body was transported to the WVU School of Medicine in Morgantown, WV.

There are general plans for a memorial service and remembrance gathering some time during the summer of 2022 although there are as yet no firm plans.



Remembering Frank Young

By Cynthia Ellis

Frank Young seemed brilliant to me. But he would not have agreed. Still, when we gathered with him and other members of the Board of Directors of the West Virginia Highlands Conservancy, he stood out as someone who admirably understood a great many complicated issues and often had something pertinent to say. We were accustomed to hearing him, with measured tones, offer up reason, research, and remembrances.

What he strove for, in discussions, was for us to be fair in our deliberations. I'm not going to be able to remember details of this story, but Frank felt that way from an early age. He told that once, growing up on Tupper's Creek, he witnessed a heated conversation between his father and a coal mining official. Whatever the disagreement was, Frank saw a person of authority jab his finger in Frank's father's chest and proclaim, "And there's nothing you can do about it!"

After that, Frank Young wanted to work so that no one felt hemmed in and powerless.

So, he did. Sure, Frank had a towing company, and there was plenty of work connected with that. But he also became a member of a number of groups striving for economic, political, and environmental justice, and he played an active and important role in each one.

With his diverse knowledge, Frank played a vital part in our organization. And, Frank was also our man with all the boxes. He had taken on so many responsibilities that he nearly always arrived with quite a load of books and papers and other supplies to help us in our work. He usually drove a large comfortable vehicle, and, before and after meetings we would head out to his car or van and dip into and transfer necessary items which he had shepherded.

Frank was a representative for WVHC and I was a

representative for a statewide birders group when we served on a citizen advisory board for the Beech Ridge wind power project in Greenbrier County. On a high mountain foggy day, we on that board met with industry and construction staff by the wind turbines and gained insight into the "footprint" of such installations. But more often, rather than on the ridgetops, any of us could see Frank in Charleston or at other locations as we manned protests, sat in on hearings, and met with ally groups. He was extremely dedicated to attending to all those proceedings.

He was similarly faithful in his efforts with the recycling center in Jackson County. Of three regional centers I have frequented, the one supervised by Frank Young was easily the most efficient and worthwhile. He certainly put his wishes for a better future into action there at that site in Ripley.

He did mention, though, that his devotion to his work caused some mild grouching at home. When the subject of not taking family vacations came up, one son remarked something like, "We never go because Dad is afraid he will miss one piece of anything that should be recycled!"

Mentioning family brings to mind Frank's wife of 54 years, Becky. Routinely, Becky accompanied Frank to meetings and events. It made us happy to see them together, because it made them happy. She would tuck herself into a quiet corner...maybe occupied with some handiwork...and in a way, convey support for us all by her support of him.

The West Virginia Highlands Conservancy benefitted immeasurably from his years of service toward preservation and conservation of our state's mountains, waters, lands, and communities. We were fortunate indeed to have known and worked with Frank Young!

Remembering Frank Young

By Marilyn Shoenfeld

I have known Frank and Becky for at least 23 years, or as long as I have been on the Board of the WVHC. My husband, Peter Shoenfeld (dec'd), became friends with Frank when WVHC was opposing the Backbone Mountain Wind Project in Tucker County. This was in the late 1990's when the planning was taking place. Peter was against the project from the start--Frank not so much. There was much arguing back and forth. Frank's sharp wit and common sense approach contrasted with Peter's mathematical view of the world. The combination produced some interesting discussions. Frank eventually joined Peter and the WVHC in opposing the project. They met with the developer many times and eventually got the project trimmed back so it was further away from Dolly Sods.

Frank would stay at our home whenever there was an event in the Canaan Valley area. He would always bring rose` wine. We would sit around and listen to his stories about growing up in West Virginia and talk about the current political scene. His pithy comments had us in stitches. Peter's health started declining but Frank would still visit him.

I am very sorry to hear of his passing and will miss him.

Remembering Frank Young

By George Beetham

Frank Young was president of the West Virginia Highlands Conservancy when I got involved in the wind issue. I contacted the Conservancy over the the Nedpower project along the Allegheny Front. I was concerned because the initial proposal called for turbines extending southward to scenic Stack Rock about half a mile north of Bear Rocks. I had found a notice in the Grant County Press and sent a note via the Conservancy website. My note was the first that Frank or Wind Committee Chair Peter Schoenfeld had heard about the project. At that time I was aware that the Conservancy had worked out an agreement with the developers of the Backbone Mountain project to limit turbines near scenic areas.

Peter urged me to get involved. I met him and Frank. It happened that my experience with topographic maps would be useful. I determined that if the southernmost Nedpower turbines were moved about a mile north, away from Stack Rock, the visual impact would be lessened. My study was incorporated into a proposal to the West Virginia Public Service Commission. The PSC, after visiting Bear Rocks, ultimately incorporated that proposal in approving the Nedpower permit.

In the midst of that situation I attended a Spring Review. At Frank's invitation I sat in in the board meeting. After the meeting Frank asked me to serve out an unexpired term on the board. After thinking it over I accepted. That morphed into being asked to run for a full term. At the Fall Review I was elected. That began an association with the board that continues.

In the 20 years of my involvement, I learned that Frank was an expert in state government and politics. I sat through meetings totally amazed at the depth of his knowledge. Needless to say, that knowledge was valuable to the Conservancy.

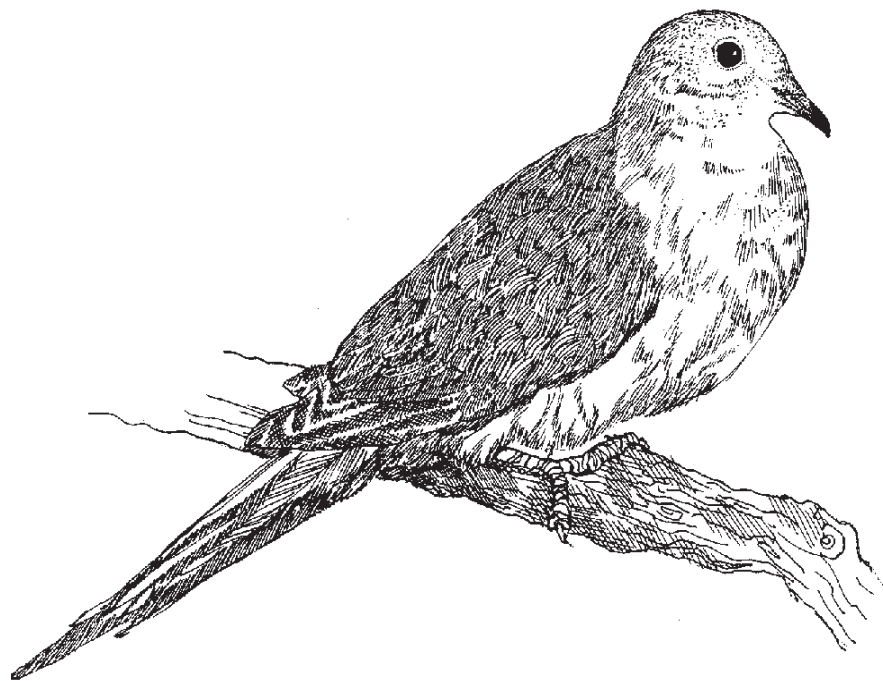
I also came to know Frank as a friend. We shared hilarious stories, but also some serious work. I disagreed with Frank on one issue that he championed. He acted hurt and angry. We just ended up on opposite sides of the issue. Yet we both moved on from that. Both of us favored wind power but also felt compelled to protect special places. Both Frank and Peter were instrumental in making that Conservancy policy.

After stepping down from the presidency, Frank continued to be a strong advocate for wind power. He also continued to be a strong presence on the board. He was one of several past presidents who continued active with the board, providing valuable continuity and experience.

Eventually I stepped down from the board. Current President Larry Thomas conferred the title of board member emeritus to keep me involved in Conservancy matters in an advisory role.

Both Frank and Peter, both instrumental in my involvement with the Conservancy, have passed on. Their passing left voids, but voids are filled. More importantly, their stewardship contributed to a healthy board that continues the work they championed for many decades. In the past few years the board has tackled a number of projects that will protect the highlands we hold dear.

Hopefully the board finds young board members to continue the work long into the future — people who will become as knowledgeable as Frank and Peter over time. The stakes are high. The work is sometimes daunting. But a lot of people as dedicated as those two have served over the years. West Virginians should be thankful for the stewardship and service of our late friend, Frank Young. We can honor him by continuing the work, protecting the special places we hold dear.



Tributes to Frank Young

*You have always been such a stable, thoughtful, reasonable personal friend, and foundation stone for so much that WVHC and other civic and environmental groups in WV have sought to do.

We already miss you. We honor you. We pray that all of us, and especially your family, will grow beyond the grief that will be is felt when now that you leave you have left us.

In admiration and deep love.... Cindy Rank, WVHC board

*Looking back now, from the perspective of this loss, I see what a long time we've all worked together and counted on each other. In a difficult time, it was Frank who persuaded me to succeed him as president. Of course, I leaned on Cindy's and John's examples, but Frank was my immediate guide and confidant. I could never know as much as he did about all the issues that would come up. We are all -- I mean the whole state -- fortunate that he took responsibility in so many ways, for so many organizations. He was ever reliable. We are inspired to continue. ~Hugh Rogers, WVHC board

*I have been reading all of your tributes and remembrances of Frank all day, and I am touched. I knew him only through the pages of the 40th Anniversary history of WVHC, but I was impressed at how he led WVHC through the critical period of the early 2000s when so much was going on, and appreciated his insightful observations of developments printed in the book. Clearly he was one of the lions of this organization and as I have only recently become involved I am humbled to be trying to carry on the good work that Frank and all of you have done over the years.

My best wishes to Frank's family and all of you who he touched. ~Dave Johnston, coordinator of the WVHC "Wilderness Stewards" program

Dear All~ I want to express my deep condolences for the loss of your friend and colleague, Frank. I am sorry that I did not get a chance to work with him or to know him. From what I have read and am hearing from you, it sounds like he was a true warrior on many beings' behalf. May I contribute to honoring him by my future work with you.

~Susan Rosenblum [new WVHC board member]

*Such an amazing leader and environmental advocate.

We have lost a truly great man. ~Beth Baldwin, former WVHC board member

*Such a loss and I'm so sad to hear. Frank was a force. A loss for certain, but a platform held strong for others to carry the torch. Cheers to Frank and a life well lived. ~Adam Cassaday, former WVHC board member

*So sorry to hear this. He put in many hours and accomplished many good things. ~Barb Douglas

*Legend. ~Clint Hogbin, Hedgesville, WV

*Sorry to hear this! ~Robin Blakeman, formerly of OVEC

*The WV Environment lost a big voice. ~LeJay Graffious, former WVHC board member

*This is a big loss for WV. Our hearts go out to his family and to the Environmental community. ~Wendy Perrone, Three Rivers Avian Center

*A loss of not just our friend, but so much knowledge, experience, and expertise. Frank knew the legislature better than its delegates and senators. Throughout his medical issues, he kept focused on issues and continued to contribute. He cared passionately about the Highlands and statewide environmental issues. Yet, there have been other losses. Too many in the short time I have been involved. New people have stepped up gotten involved, equally passionate. Frank could be acerbic, combative, and determined. But he remained a friend after he stepped off your toes. We honor him by continuing the work we all have chosen, to which he dedicated so much of his life. ~George Beetham, WVHC board member emeritus

*I have not had the chance to work directly with Frank, but it is easy to appreciate all he has done for the Highlands Conservancy and E Council. Frank will certainly be missed both as a stalwart champion of the Highlands and as a friend. I also appreciate Becky, whose quiet, industrious presence was so much a part of the tapestry of our meetings. Thank you, Frank and Becky, blessings to you both.

~Randy Kesling, WVHC board member

*It's a sad day indeed. I didn't know Frank as well or for as long as many of you did, but through our service together on the WVHC Board I gained an enormous respect and admiration for him. From the moment you first met Frank, you knew you were dealing with a man of intelligence and compassion and fierce dedication to principle. It's a shame that the majority of West Virginians will neither realize nor appreciate what Frank Young has done for them. ~Jim Van Gundy, former WVHC board member

Something Useful from Acid Mine Drainage: Is that Possible?

By John McFerrin

One type of materials that is necessary for modern life is a class of minerals known as rare earth elements. These elements are necessary components of modern technologies. They are used in cellular phones, computers, televisions, magnets, batteries, catalytic converters, defense applications and many more things that make modern life possible. Now researchers at West Virginia University are working on a method to recover these rare earth elements from an unexpected source: acid mine drainage.

Rare earth elements are a type of elements with exotic sounding names such as terbium, dysprosium, holmium, erbium, thulium, ytterbium, lutetium and yttrium. In spite of their name, they are really not all that rare. They are not so common as elements such as silicon, carbon, or iron but they are still moderately plentiful.

The difficulty with obtaining them for use is that they are not concentrated. They also only exist in nature bound up with other minerals. There are no instances of old prospectors plucking up nuggets of erbium or movies of miners doing a happy dance when they strike a big terbium vein. Such things do not exist. Instead, extracting useable quantities of rare earth elements has always involved crushing large amounts of rocks in order to extract small amounts of rare earth elements.

Because the rare earth elements are not concentrated, the usual method of extracting them involved mining large amounts of rock, crushing it to a powder, and using several rounds of chemical processing to extract useable concentrations of rare earth elements. The process produces rare earth elements along with a lot of waste. Most of the current production is in China. This makes its availability in the United States subject to all the uncertainty that comes from the United States' relationship with China.

In a nutshell, rare earth elements are necessary to modern life but messy to mine and available mostly from foreign sources, subject to political uncertainty.

Now researchers at West Virginia University are trying to solve the difficulty of the availability of rare earth elements by extracting them from one thing that West Virginia has plenty of: acid mine drainage and acid mine drainage sludge.

The acid water on mine sites has dissolved in it a wide variety of minerals. If the mines are still active or there is someone taking responsibility for it, the water is directed into a pond or some other treatment facility. There it is treated so that the minerals drop out and become sludge on the bottom of the facility. The clean water flows to the stream. If the mine is abandoned and no one is taking responsibility for it, the water flows to streams untreated. The most visible result is the iron in the water, turning the stream and its bed orange.

Now researchers at the West Virginia Water Research Institute are developing a method to extract rare earth elements from both acid mine drainage and acid mine drainage sludge.

This is possible because the acid water had already done the first steps in concentrating the rare earth elements. In most rare earth mining operations, the rare earth minerals are in such small concentrations that extracting a useable amount requires crushing a lot of rock and going through a multi-step refining process. At coal mines, the acid water flows through the rock overburden, dissolving the rare earth elements along with the iron, aluminum, magnesium, etc. that are more visible. Anyone seeking rare earth

elements would still have to separate them from the iron, etc. in the sludge but that is much easier than starting with separating them from the rock. Researchers are also working on extracting rare earth elements directly from the acid mine drainage, before it drops out of the water and becomes part of the sludge.

If this works, it would be a great thing. Acid mine drainage is a chronic problem in West Virginia, one that the West Virginia Highlands Conservancy and other individuals and groups have spent decades begging, pleading, and suing in hopes of getting someone to address. The main reason it has never been addressed is money. Treatment of acid mine drainage is an expensive nuisance while the mining is going on. Once the mining is over, it is an obligation to be gotten rid of if possible. If the operator is not clever enough or unscrupulous enough to get rid of the obligation, it is a financial burden, begrudgingly taken care of.

Researchers who can figure out a way to turn these financial burdens into profitable rare earth extraction operations will be modern Rumpelstiltskins, spinning straw into gold. They could turn what is now a financially draining treatment obligation into something that at least breaks even.

Whether the West Virginia Water Research Institute can do this remains an open question. So far, they have done it in the lab. In the spring, they plan to open a demonstration project near Mt. Storm in West Virginia. This may turn out to be an idea that makes a significant dent in our acid mine drainage problem while providing the United States with a domestic source of rare earth elements. On the other hand, it may turn out to be one of those ideas that sounds good in theory but in practice never works as hoped for. Babe Ruth went to the plate 10,626 times in his career. He hit 714 home runs. He also struck out 1330 times.

The United States Department of Energy apparently believes that this idea has the potential to work. The research so far has been funded largely by grants from the United States Department of Energy. The recently passed Bipartisan Infrastructure Investments and Jobs Act authorizes one hundred and forty million dollars to study rare earth elements extraction.

Finders Keepers? Or not?

Even if nobody knows for sure whether the technology for extracting rare earth elements from acid mine technology will work, there is already interest at the Legislature in clarifying who owns the minerals extracted.

Always before the owners of the mineral rights were only interested in mining the coal. The minerals in the drainage were just something to get rid of. When the iron was turning the creek red, it was all, "Oh, that's not mine. Must be somebody else's iron."

Now that there might be valuable, extractable rare earth elements, the mineral owners will want to claim ownership. Some who are interested in this technology have already appeared at interim Legislative meetings to suggest that the Legislature adopt legislation saying that whoever extracts the minerals from acid mine drainage gets to keep those minerals. There may well be a bill in the Legislature clarifying ownership of the minerals extracted from mine drainage.

Old Song

This country
 lays a living claim this hour,
 the upsweep of ridges
 rising beyond
 the nearby band of burning, beating oranges
 and flickering yellows of foliage

Cast in
 vagrant, vast shadows
 of the billowing slate cold blows
 of close October clouds

Long while since
 I've been around,
 a long while

Is a country that draws,
 that draws,
 that fills
 hungering open spaces
 with rumpled thicknesses
 and deepening hues of
 lavenders and midnight beryl

And then a moment's quicksilver
 quiver of light
 falls distant
 on
 more dimming, broad upheaves

That descend dusky
 to the east,
 so I'm told,
 into the ocean fold and cradle
 of the Greenbriar Valley

And if I miss remembering this,
 if I miss remembering,
 there will be no
 home for my swale and hogback flesh,
 no home-born tendons
 left
 to wrap
 my earthen bones

No rivulets running
 wild and ancient
 in the far down chambers of
 a once creeked heart

Heart that departed,
 departed, departed, departed

Yet this country,
 yes,
 this country now,
 its flagrant,
 unfettered, brave,
 hawk whirled
 lastingness

Is still my morning song,
 the one I made my own,
 the furtive one
 I used to imagine
 lifted
 all the hills
 into the auroral coral
 of dawn

And look –
 in the
 cherish
 of the etchings
 of these swelling,
 muted blue upscapes -
 to drift it again,
 the old song,
 into the lucent, living air

Lift it again
 on the native wings
 of my
 breath

John Slocumb, 2021

Dolly Sods Designated as LNT “Hot Spot”.

The Leave No Trace Center for Outdoor Ethics (LNT) has announced that the Dolly Sods Wilderness has been designated as one of its 2022 Hot Spots, and will devote special attention and resources to the impacts which threaten its natural character.

There has been a steady rise in visitation at Dolly Sods over the past decade, with a significant spike during the pandemic. This had led to significant impact on and degradation of the wilderness character of Dolly Sods. The LNT organization will coordinate with the Monongahela National Forest and WVHC's Dolly Sods Wilderness Stewards to plan training, workshops and community events to address specific issues related to the effects of high visitor use. These include the proliferation and impact of campsites, vegetation loss, and appropriate backcountry practices.

We will share more information and announcements of events as plans develop.

<https://lnt.org/hot-spots/dolly-sods-wilderness-2022-dates-tbd/>

Become a Wilderness Steward

Dolly Sods Wilderness Stewards do not need to have any special experience or expertise. There is no specific time commitment required; some people may live close and be available more often, but even those who only visit occasionally are welcome to participate as their schedule allows. We recommend and encourage all volunteers, especially the Trailhead Stewards, to take two online courses on the basics of the Wilderness Act and Leave No Trace awareness. Volunteers will be provided with inperson training by the Forest Service and resources to use at the trailheads. WVHC will provide each volunteer with a WVHC T-shirt and cap to help identify them to visitors.

For more information and to sign up online as a Wilderness Steward, go to <https://bit.ly/3pBjiyV>, or contact Dave Johnston at dollysodsstewards@gmail.com.

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Mon National Forest Hiking Guide

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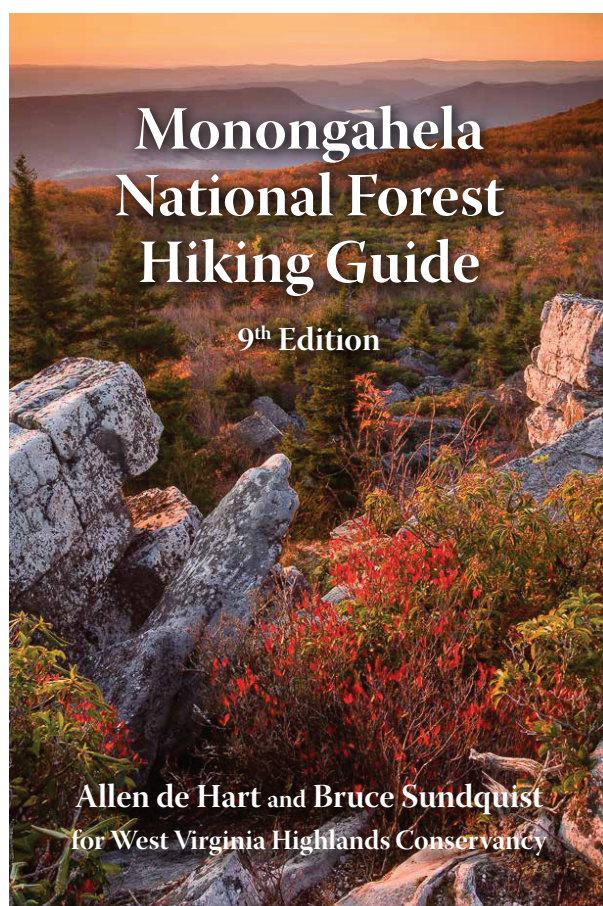
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The Highlands Voice is the main way that the West Virginia Highlands Conservancy communicates with its members. But we would like to communicate with more than our members. We have a valuable perspective and information; we would like to communicate with everybody. We still offer electronic delivery. If you would prefer to receive it electronically instead of the paper copy please contact Dave Saville at WVHC50@gmail.com. With electronic delivery, you will receive a link to a pdf of the Voice several days before the paper copy would have arrived.

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BUMPER STICKERS

To get free *I ♥ Mountains* bumper sticker(s), send a SASE to P. O. Box 306, Charleston, WV 25321. Slip a dollar donation (or more) in with the SASE and get 2 bumper stickers. Businesses or organizations wishing to provide bumper stickers to their customers/members may have them free. (Of course if they can afford a donation that will be gratefully accepted.)



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- The baby shirts are certified organic cotton and are offered in one infant and several toddler sizes and an infant onesie. Slogan is “I ♥ Mountains Save One for Me!” Onesie [18 mo.]---\$25, Infant tee [18 mo.]---\$20, Toddler tee, 2T,3T,4T, 5/6---\$20
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To order by mail [WV residents add 6 % sales tax] make check payable to West Virginia Highlands Conservancy and send to West Virginia Highlands Conservancy, Online Store, PO Box 306, Charleston, WV 25321-0306

The same items are also available at our on-line store: www.wvhighlands.org

T- SHIRTS

White, heavy cotton T-shirts with the **I ♥ Mountains** slogan on the front. The lettering is blue and the heart is red. “West Virginia Highlands Conservancy” in smaller blue letters is included below the slogan. Short sleeve in sizes: S, M, L, XL, and XXL. Long sleeve in sizes S, M, L, and XL. **Short sleeve** model is \$18 by mail; **long sleeve** is \$22. West Virginia residents add 6% sales tax. Send sizes wanted and check payable to West Virginia Highlands Conservancy ATTEN: Online Store, WVHC, P.O. Box 306, Charleston, WV 25321-0306.



HATS FOR SALE

We have West Virginia Highlands Conservancy baseball style caps for sale as well as I ♥ Mountains caps.

The WVHC cap is beige with green woven into the twill with a pre-curved visor. The front of the cap has West Virginia Highlands Conservancy logo and the words West Virginia Highlands Conservancy on the front and I (heart) Mountains on the back. It is soft twill, unstructured, low profile, sewn eyelets, cloth strap with tri-glide buckle closure.

The I ♥ Mountains The colors are stone and red.. The front of the cap has I ♥ MOUNTAINS. The heart is red. The red hats are soft twill, unstructured, low profile, sewn eyelets, cloth strap with tri-glide buckle closure. The stone has a stiff front crown with a velcro strap on the back. All hats have West Virginia Highlands Conservancy printed on the back. Cost is \$20 by mail. West Virginia residents add 6% tax. Make check payable to West Virginia Highlands Conservancy and send to West Virginia Highlands Conservancy, Atten: Online Store, P.O. Box 306, Charleston, WV 25321-0306