



# The Highlands Voice

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

Volume 54      No. 10      October, 2021

## Wilderness Stewards Tackle Fall Crowds

By Dave Johnston

The last week of September and first two weeks of October are prime time in Dolly Sods. Although climate change appears to be causing the peak of fall colors to occur later, historically the last weekend of September heralds the onset of the brilliant color season in the northern West Virginia Highlands. The Tucker County Leaf Peepers Festival (canceled this year) brings large numbers of visitors to Canaan Valley, Blackwater Falls and, of course, Dolly Sods, where the famous scarlet blankets of blueberry, huckleberry and other foliage of the heath barrens create a “fire on the mountain” effect.

In recent years the peak of fall colors has been moving toward early October, and this year appears to continue that trend. As of the last week of September, only the maples are showing widespread color, and the berry bushes of the Sods, while

tipped with red, have yet to reach their uniform brilliance. It is likely that once the show gets rolling and word gets out, the first couple weekends of October will once again attract hordes of foliage seekers to the Sods. The Dolly Sods Wilderness Stewards are ready!



### Trailhead Stewards

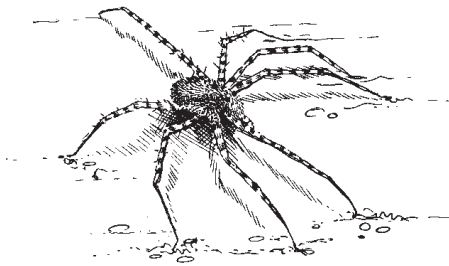
As they have done all summer, the Trailhead Stewards continue their presence at the most popular trailheads during they busiest times of the weekends. The Stewards greet visitors and offer to be a resource for people heading out into the wilderness. This usually results in a conversation about suggested routes

for backpackers and realistic loops or out-and-back destinations for day hikers.

(More on p. 2)

### What's inside:

Protecting Dolly Sods	3	Get a history book	9
Nominating new officers	3	Still in need of something to read	10-11
ATVs at East Lynn	4	Bats	10
Annual Meeting plus big fun	5	Hearing on MVP	12
Thoughts from our President	6	Get a Hiking Guide	13
Climate change?	7	Trees and climate	14
Public Service Commission	8	Officers and directors	15
Reclaiming old mines	8	Get stuff	16
How to join	9		



## Wilderness Stewards (Continued from p. 1)

During the conversation the Stewards work in key messages about what to expect in the wilderness, and how to help preserve it for others to enjoy. The Stewards make sure hikers understand the special nature of the wilderness, and the rules and recommendations of the Monongahela National Forest (MNF) specific to this wilderness. The Stewards refer to the seven Leave No Trace principles, customized for the particular challenges of Dolly Sods.

Over the past several months volunteer Trailhead Stewards have logged about 250 hours at the trailheads and have talked to more than a thousand visitors. The response has been uniformly enthusiastic, with many visitors asking follow-up questions and thanking the volunteers profusely for helping them and for caring for the wilderness.

The Trailheads Stewards will be making a special effort to maintain their coverage of the trailheads during this busy season.

### Solitude Monitoring

When thinking about wilderness character we tend to focus on preserving natural processes, free of human interference. Yet one of the key values of wilderness character called out in the Wilderness Act of 1964 is a distinctly human one: the “opportunity for solitude”. This reminds us that wilderness is not only for nature – it provides us humans with an opportunity to experience nature directly, without everyday distractions or social interactions.

To assess how close wilderness areas under their management come to meeting the goals of the Wilderness Act, land use agencies need to measure the degree to which they provide an “opportunity for solitude”. Such an assessment by the MNF is due for the Dolly Sods Wilderness. The Wilderness Stewards, in conjunction with another partner organization, the Southern Appalachian Wilderness Stewards, are currently conducting surveys of certain representative routes within the wilderness to record the number of encounters during a typical hike.

Routes representing three usage levels, Very High, High, and Moderate, have been selected. The Very High route is basically the Bear Rocks and Raven Ridge trails to Rocky Ridge. The High route is the Big Stonecoal and Rocky Point trails to Lions Head, and the Moderate route is the Wildlife and Rohrbaugh Plains trails to Rohrbaugh Cliffs.

Volunteers are hiking each route for two hours, then turning around and hiking back for two hours. Along the way they record every time they see or hear another group of hikers and note the numbers. They do the same for occupied campsites, and note any other sites within close proximity. The forms with encounter records will then be provided to the MNF.

Those who hike in Dolly Sods know intuitively that opportunities for solitude are limited, at least along many of the trails. The solitude monitoring effort will provide numbers for that, which the MNF can compare with general wilderness standards as well as past and future surveys. This can then become an element in prescriptive actions to improve and preserve the wilderness character of Dolly Sods.

### Registration Boxes

Many years ago the trailheads at Dolly Sods had registration boxes for hikers to sign in. But the MNF was not able to keep them maintained and collect the completed sheets on a regular basis, so they were taken down. When WVHC first approached the MNF last



spring to ask what volunteers could do to help, maintaining trailhead registration boxes was at the top of the list.

WVHC donated the materials for construction of the boxes, and they were installed at each of the Dolly Sods trailheads along FR 19 and FR 75 in mid-September. Signing in is voluntary for hikers, but so far it appears that the boxes are well-received, and the majority of hikers take advantage of them. The forms are simple, asking only for a name, date, planned route, number of nights and number of people in the party, and a zip code. The boxes display a sticker acknowledging WVHC's contribution with a link to the web site.

Wilderness Stewards will be visiting the boxes on a regular basis, checking their condition, replacing pencils and collecting filled sheets, which will be turned over to the MNF. WVHC is also recording the data (but not names) for its internal use and analysis. By agreement with the Forest Service, we cannot publicly release the numbers at this time, but during the first 10 days several hundred parties registered, with nearly 1000 hikers entering the Dolly Sods backcountry.

The addition of the registration system, enabled by WVHC volunteers, is one of the more significant accomplishment of the Wilderness Stewards program. The resulting data will enable the MNF to quantify the high levels of visitation in the Dolly Sods Wilderness. This will guide management decisions about campsite and trail conditions, allocation of resources, and provide documentation needed to obtain additional resources.

By the end of October the Dolly Sods Wilderness Stewards will have completed its first season of activity. We will have the opportunity to debrief and assess the results of the efforts, and work with the MNF to plan for next year. The Trailhead Stewards will be back, and registration information will continue to be collected. We hope to expand the program to include a thorough inventory of campsites and trail conditions, and begin trail maintenance work. If you would like to be part of all this, please visit <https://wvhhighlands.org/dolly-sods-wilderness-stewards-form/> to sign up!



## To protect a fragile biome

By George E. Beetham Jr.

We think of wilderness as being a vast expanse of wild land. Indeed, Dolly Sods consists of many acres of land. At the same time we need to understand that this area is a unique ecosystem with finite limits.

Essentially the Sods is a dissected, sub Arctic plateau featuring high elevation bogs drained by a stream. There are limits to how much human incursion it can handle before the ecosystem breaks down. Erosion, pollution of bogs and streams, degradation of the land by over-camping take a toll on the environment. We don't see it at first, but over time the abuse adds up. Ultimately we end up with results similar to what was left by lumber companies: an unnatural landscape that no longer functions as a natural biome.

We need to understand what nature intended for this fragile land where natural processes are already limited by weather and elevation. Is it a functioning ecosystem that lives and breathes or a trampled down city park that once had a biological purpose? More importantly, how do we enjoy the unique landscape while preserving its natural purpose?

Clearly we cannot stand by and watch this natural treasure degrade. If we are the animal that thinks, we must consider the effects of our use of the land. We have managed to save the Sods from mining, timbering, and development to preserve a natural habitat that invites people seeking to explore its wonders. Now we need to protect it from the "lovers of nature" who cut live trees for firewood, litter campsites, and neglect to dispose of human waste in a sanitary manner.

Our Wilderness Steward program was an important step designed to educate recreational users. Over time it should have a positive impact, allowing access to a wild land where natural extremes shaped the land and its ecosystem.

Ultimately, though, pressures will continue to multiply. The Sods is within a half day of travel from Pittsburgh, Philadelphia, Baltimore, Washington, Richmond, and Norfolk. It is a sought after wilderness destination. Yet it is a natural habitat where the processes of nature must prevail. If we allow the wilderness to be trampled, polluted, eroded, and destroyed we will not have a wilderness to preserve.

The National Forest Service will need to closely monitor wilderness usage, perhaps establish limits to how many people may access the land at any time. Registers at trailheads are a way of creating a database of wilderness use. Where are they going, where will they camp, how many in the party, how long will they stay are questions that will help the Forest Service protect the unique and fragile environment that draws so many people to the Dolly Sods. It will allow people to enjoy the fragile wilderness while preserving the natural processes that make it unique.

## Nominating Committee Report

Last year's Annual Meeting was a bit topsy-turvy due our relative inexperience with Zoom meetings. Consequently, our normal election process was out-of-wack as well and our approach this year is an attempt to bring things back into routine.

As it stands currently, the proposed slate of officers and directors to be voted on at October's Annual Meeting is explained as follows.

All the **Officers** were voted in for only one more year at last year's (2020) Annual (Zoom) Meeting. They have agreed to be nominated to finish out the final year of their current two-year terms (- i.e., until next October 2022 when each position will be revisited again for the regular two-year terms that usually are filled in even years).

[Note: We do need to think ahead about a new Vice President for State Affairs since Frank's health is a major obstacle these days. Larry will assist by representing the West Virginia Highlands Conservancy on the WV Environmental Council, but Frank's broad experience and insightful observations will be difficult to replace in the overall VP role.]

### **Directors-At-Large (DAL)**

-- The five Directors at Large whose terms are expiring this year (2021) are included in the proposed slate of nominees along with the Officers. Currently serving are George Hack, Rick Webb, Hugh Rogers, and Ellie Bell. There is one vacancy in this group of Directors and the committee is recommending Susan Rogers Rosenblum who has expressed an interest to serve.

The five DAL whose terms were to expire in 2020 were voted in for only one year at last year's Annual Meeting. Four of those five will be re-appointed by President Larry to serve out the remaining year of their two-year terms expiring in 2022. Jackie Burns, Randy Kesling, Kent Karriker, and Patricia Gundrum currently hold those positions and have agreed to continue. Jim Van Gundy will be stepping aside and Larry has appointed Luanne McGovern to fill his post until the next election in 2022.

*The Highlands Voice* is published monthly by the West Virginia Highlands Conservancy, P. O. Box 306, Charleston, WV 25321. Articles, letters to the editor, graphics, photos, poetry, or other information for publication should be sent to the editor via the internet or by the U.S. Mail by the last Friday of each month. You may submit material for publication either to the address listed above or to the address listed for Highlands Voice Editor elsewhere in this issue. Electronic submissions are preferred.

*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](http://www.wvhighlands.org).



# ATVs Still in the East Lynn Wildlife Management Area

By John McFerrin

A proposal for an expansion of the Hatfield-McCoy trail system for All Terrain Vehicles (ATVs) in Wayne County has come and gone, leaving what many had seen as a problem unaddressed.

The United States Army Corps of Engineers owns the land surrounding East Lynn Lake in Wayne County. It does not, however, manage the land. Instead, it leases it to the West Virginia Department of Natural Resources. The DNR manages it as a Wildlife Management Area; hunting is a prominent use.

Even though ATV riding is not legal on a wildlife management area, it is widespread at the East Lynn Wildlife Management Area. This has resulted in various problems such as open dumps on the property. Riding in an unsafe manner is also a concern.

To solve these problems, the Hatfield-McCoy Regional Recreation Authority proposed that it assume control of approximately 9,000 acres of the approximately 24,000 acre Wildlife Management Area. It would build or improve about 48 miles of trails in the area it controls. At the same time, it would decommission about 116 miles of trails in the part of the Wildlife Management Area which would remain under the control of the Department of Natural Resources. The net effect of this would be to move the ATV use off of the Wildlife Management Area that DNR manages for wildlife, including hunting, and onto the area managed by the Hatfield-McCoy Regional Recreation Authority.

The Hatfield-McCoy Regional Recreational Authority maintains a system of over 700 miles of ATV trails in southern West Virginia. Having it operate trails in the Wildlife Management Area would mean that the trails would be better maintained. Authority management would also bring with it rules such as safety rules, age limits for riding, bans on alcohol and littering, prohibitions on leaving marked trails, etc. If the Authority's management of the other trails in its system is any guide, there would be law enforcement to enforce these rules. The Authority would also charge a fee to use the trails.

To some, this seemed like an ideal solution. The ATV users would still have a place to ride but, because of the management of the Hatfield-McCoy Regional Recreational Authority, it would



**East Lynn Wildlife Management Area**

be in a more controlled manner that would prevent problems from developing.

Others didn't see it that way. The Department of Natural Resources didn't like the plan because it would lose well over a third of its Wildlife Management Area. Loss of part of the Wildlife Management Area would not be popular with those who used it, particularly hunters.

The most vocal opponents were the present ATV users of the Wildlife Management Area. They liked the status quo. Even though the prohibition on ATVs in a Wildlife Management Area makes the status quo illegal, there is no effective enforcement. The present users enjoy the freedom from rules that the status quo offers, even referring to the trails as "outlaw trails" and articulating their goal as maintaining their freedom and their "outlaw trails."

In the face of the opposition, the Hatfield-McCoy Regional Recreation Authority has abandoned the idea. While it would like to expand its network wherever appropriate, it has little enthusiasm for a project in the face of such opposition. It has other projects it could pursue.

So we are left where we began. There is nominally illegal activity going on on public lands. One idea to solve the problem did not work. We will see if the Department of Natural Resources or someone else has any other ideas. It has said publically that it will increase patrols in the area. The effectiveness of this solution depends, as it so often does, on the resources it has, the other demands upon those resources, etc.



**East Lynn Wildlife Management Area**





## WEST VIRGINIA HIGHLANDS CONSERVANCY

### FALL REVIEW 2021

Saturday, October 30 // 1PM-8PM

Annual Meeting and Elections:  
Sunday, October 31 // 10AM-4PM



Please join us (on Zoom) for our Climate Change themed Fall Review with Keynote Speaker and author Katie Fallon at 7PM.

### SCHEDULE: OCT. 30

Presentations: 45mins // Q&A 15mins

Yoga Breaks with Jackie Burns: 10 mins between presenters

1:00-2:00 Dave Johnston: Dolly Sods Wilderness Stewards

2:15-3:15 CASRI: Managing Forests for Climate Resilience in WV

3:30-4:30 Tim Cronin: Clean Energy for WV Utilities

4:45-5:45 Rick Webb: Conservation Hub and the Candy Darter

6:00-7:00 Dinner break: Sen. Manchin\*; Doughnut Economics

7:00-8:00 Katie Fallon: Conserving Birds in a Changing Climate

OCT. 31: 10:00-4:00 Election of Board and Officers

RSVP Here or on our website:

[www.wvhighlands.org](http://www.wvhighlands.org)



Check out  
our website

\*Senator Manchin's segment is a short pre-recorded video



## Thoughts from our President By Larry Thomas

October, the month that keeps Mother Nature busy with her paint brush and pallet as she as she goes to work using scarlet, purple, orange, yellow and browns to create the spectacular show of the fall foliage, one of the tourist attractions which brings so many visitors to the highlands of West Virginia. Visitors are in for a terrific show when the leaves reach their peak toward the end of October.

### **2021 WVHC Fall Review, Annual Membership Meeting and Quarterly Board Meeting**

The Fall Review Committee has been working very hard putting together a great agenda for this year's fall review. Information is included in this Highlands Voice. Please make your plans now to attend.

WVHC committees were again busy during September. A few highlights follow:

### **Dolly Sods Wilderness Stewards Project**

WVHC is very pleased with the Dolly Sods Wilderness Stewards program as we are now in the very busy fall season, where visitation to our highlands will skyrocket and the already overcrowding at Dolly Sods is projected to accelerate. I want to personally thank all of the volunteers who have volunteered their time at the trailheads and for participating in the solitude monitoring surveys. See the article in this month's Highlands Voice for an update of the project.

### **Monongahela National Forest**

The WVHC Public Lands Committee continues its review of proposed projects in the Monongahela National Forest and providing comments on issues of concern.

### **Greenbrier Southeast Project**

This project seeks to improve forest stand health and composition to improve future wildlife habitat and to provide for future commercial timber sales and economic projects. The project area is located in the Greenbrier Ranger District in Pocahontas County, WV, approximately 2 miles east of Bartow, WV.

We will be discussing this list of questions and concerns with Forest Service representatives

1. Cumulative impacts to candy darter habitat.
2. Existing degradation of aquatic habitat and causes.
3. Accounting for environmental sensitivities and risk in project design.
4. Old and new road and skid trail impacts.
5. Sufficiency of aquatic effects monitoring.
6. Climate change and project implications for ecosystem resiliency and carbon storage.
7. Access to GIS and other data used in project planning.

One of our initiatives is to determine and assess Forest Service policy and practice with respect to candy darter habitat and response to Endangered Species Act listing.

There are many proposed actions that will begin or are currently undergoing environmental analysis and documentation. They are documented in the Forest Service Schedule of Proposed Actions for the Monongahela National Forest (SOPA) [USDA Forest Service - SOPA - Monongahela National Forest \(fs.fed.us\)](https://www.fs.fed.us/monongahela/sopa/), which are published quarterly. It is impossible for the WVHC public lands committee to review all proposed actions. If you see something that

you believe we should be following, please let us know.

Many individuals visiting the Mon. are not fully aware that there are general forest rules to be followed. They can be found at [Monongahela National Forest - Home \(usda.gov\)](https://www.usda.gov/monongahela/). These are common sense rules and if followed add to everyone's enjoyment of this national treasure.

### **Off Road Vehicles Are a Threat to Our Public Lands in West Virginia**

Persistent efforts continue to promote off road vehicle use on our public lands, Federal and state, in West Virginia. For obvious reasons, the West Virginia Highlands Conservancy strongly opposes allowing this activity on our public lands. Some reasons include:

- Our public lands are places of rest, solitude, peacefulness, and refuge. They are not the place for the noise and commotion that come with ORVs/ATVs. The noise is far too intrusive.
- They promote one use of public lands while destroying all the other values that our public lands have. They just do not fit or belong on our public lands.
- Protective rules that have long been established for our public lands would be substantially relaxed with the allowance of ORVs/ATVs on those public lands.
- There are numerous examples (videos and photos) of the destructive impacts where off road vehicle recreation is currently allowed on public lands and private lands.
- There are numerous examples of the cost for constant repair and restoration where OHVs have been used.
- There is a demonstrated need for constant monitoring/policing of the activities where OHVs are used and who would pay the costs of such monitoring/policing.
- There are numerous examples of the types of risks that are involved, accidents, deaths etc. Sample reports and photos are widely available.

Off road vehicles are defined as any civilian off-highway vehicle, including motorcycles, motorized dirt bikes, All Terrain Vehicles (ATVs), snowmobiles, dune buggies, 4-wheel-drive jeeps, sport-utility vehicles, and any other civilian vehicles capable of off-road, terrestrial travel (including utility vehicles [UTVs] and ATVs with more than 4 wheels).

The Public Lands Committee is busy researching the effects of allowing the use of off road vehicles on public lands and is preparing an Allegheny-Blur Ridges Alliance Conservation Hub project to support the WVHC position on permitting off road vehicle use on West Virginia public lands. The research includes the negative effects they create including impacts to soils, watersheds, vegetation, wildlife and their habitats, water quality, air quality and the creation of socioeconomic implications. Those impacts accrue very quickly and go way beyond interfering with a peaceful atmosphere. That's why West Virginia Highlands Conservancy and other environmental organizations think that it is a bad idea to consider permitting them anywhere on our public lands.

Please get out and enjoy the Mother Nature's transition of the mountains during October. Perhaps our paths will cross somewhere along the way.

# What Happens on Climate Next in DC? Your Guess Is as Good as Mine.

By Perry Bryant

As of the first of October, the House of Representatives has delayed consideration of the bipartisan infrastructure bill. Speaker Pelosi did not have the votes to get it passed when Progressive Democrats indicated they would vote against it unless the Senate first passed the much larger \$3.5 trillion Build Back Better bill, the budget reconciliation package. The delay in voting on the bipartisan infrastructure bill triggered further negotiations on the Build Back Better bill.

Both bills have important climate provisions. The smaller bipartisan infrastructure bill has the following major climate provisions: \$16 billion for capping orphaned wells and cleaning up abandoned mines, including the reauthorization of the Abandoned Mines Land program for 13 years; \$15 billion for electric vehicle charging stations; \$73 billion for upgrading the electricity grid; and \$47 billion for climate resiliency projects.

Even with all this funding to address the climate crisis in the bipartisan infrastructure bill, the major climate measures are in the larger Build Back Better bill. As drafted by the House of Representatives and supported by both the House and Senate leadership, the Build Back Better bill includes a Clean Electricity Performance Program that will pay utility companies to switch to clean energy sources and penalize them if they didn't achieve an increase in clean energy generation of 4% a year. Four percent annually doesn't sound like much but is actually an aggressive schedule, and is designed to get the nation's electrical grid to 80% clean energy by 2030.

The House version also contained billions of dollars in tax credits for installing clean energy such as solar, hydro, geothermal, nuclear (it produces no carbon dioxide, one of the major drivers of climate change) and other clean energy sources. Electric vehicles (EVs) would qualify for tax credits up to \$12,000 per vehicle. And there is a fee on leaks of methane during drilling, processing and distribution of natural gas.

Senator Manchin has expressed some fundamental concerns about the Clean Electricity Performance Program. Senator Manchin questioned whether the federal government should pay utilities to switch to clean energy and suggested that the government should provide low-interest loans instead of grants, which is likely to lead to higher consumer electric bills. Additionally, Senator Manchin has proposed that spending should be on "innovation not elimination." Yet, the world's climate scientists have concluded that we must transition away from burning fossil fuels and to renewable forms of energy. Senator Manchin is the Chair of the Senate Energy and Natural Resources Committee and a pivotal vote on the Build Back Better bill which will only pass with all 50 Democratic Senators voting in favor of it.

The four major provisions in the House version of the Build Back Better bill (the clean electricity program, tax credits for clean energy, tax credits for EVs, and the methane fee) as well as other smaller measures are designed to reduce the United States' greenhouse gas emissions by 45% by 2030. The four major programs account for two thirds of this reduction. Congressional leaders believe that state action in states such as California, New York, Washington, etc. will reduce emissions by another 5%, reaching President Biden's

goal of achieving a 50% reduction in greenhouse gas emissions by 2030.

Having adopted policies in place demonstrating that the U.S. will reduce greenhouse gases by 50% by 2030 is important as President Biden prepares for the U.N. conference in Glasgow, Scotland in early November. The Conference of Parties (COP) 26 is perhaps the world's last best chance to keeping global warming below 1.5 degrees Celsius from pre-industrial levels, which is the benchmark established by climate scientist for avoiding the worst impacts of climate change. There's no guarantee that if the U.S. provides leadership on climate that other countries, particularly China and India, will reform their emissions. But the opposite is probably very true. If the U.S. fails to provide global leadership on climate, it will give China and India a green light to continue their extraordinarily high emissions.

While China's recent decision to stop funding coal-fired power plants in other countries is a positive step in the right direction, they have not announced significant steps to reduce greenhouse gas emissions in their own country. If the world is going to keep global warming below the 1.5 degrees Celsius threshold, it will be essential for China to bring new commitments for emissions reductions to the Glasgow conference.

What happens in DC and Glasgow over the next month is crucial to address the climate crisis. You can help in this effort. We can't impact what China does. But we have an opportunity and an obligation to try and impact Senator Manchin. Please call Senator Manchin's office and urging him to support the Clean Electricity Performance Program, tax credits for installing clean energy, tax credits for purchasing EVs, and a fee on methane leaks at natural gas facilities. Senator Manchin's office number in DC is 202-224-3954. Thanks.

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.



# Time for the PSC to Protect WV Ratepayers

By James Van Nostrand

Few cases better illustrate the abject failure of the West Virginia Public Service Commission to protect ratepayers than its approval last month of American Electric Power's proposal to charge its West Virginia customers \$383.5 million for environmental upgrades at its three coal plants in the state.

The expenditures are necessary to keep the Mitchell, Amos and Mountaineer coal-fired power plants open past 2028. AEP's own testimony in the case showed that the ratepayers of Wheeling Power — which owns the Mitchell plant — would save \$27 million per year if the plant were retired in 2028, instead of making the upgrades. The PSC approved AEP's request anyway.

That the decision was a bad deal for ratepayers was confirmed by companion decisions in Virginia and Kentucky regarding the same upgrades at the same plants. In July, the Kentucky Public Service Commission said "no" to Kentucky Power (an AEP affiliate) recovering a portion of the Mitchell upgrade costs from Kentucky customers.

Last month, the Virginia State Corporation Commission said "no" to Appalachian Power recovering a portion of the upgrade costs related to the Mountaineer and Amos plants from Virginia customers. Those decisions were consistent with the evidence in the case: It is a bad deal for ratepayers — whether in West Virginia or Virginia or Kentucky — to invest more money in decades-old plants that are already uneconomic just to keep them open for another 12 years, as their cost-competitiveness continues to decline in the face of cheaper alternatives.

The response of AEP? Refile the case at the PSC in September and ask West Virginia ratepayers to pick up the costs rejected by Virginia and Kentucky. Think of it this way: As West Virginia University lines up against Virginia Tech at Puskar Stadium on Saturday, would you want part of your ticket price to help pay the salary of Hokie football coach Justin Fuente? When WVU tips off against Kentucky at the WVU Coliseum in basketball, would you want your ticket proceeds to help pay the salary of Kentucky Coach John Calipari? No, of course not.

But that's what AEP is seeking in this filing. Virginia and Kentucky have both said "no" to spending additional money on these uneconomic coal plants, so AEP refiled its case to stick West Virginia with the unrecovered costs, thereby increasing its request from \$383.5 million to \$448.3 million.

In my 40-plus years in the energy business — including five years at one of the best utility commissions in the country and more than 20 years representing electric utilities in rate cases in six states — I have never seen anything quite as audacious as AEP's push for almost a half-a-billion dollars to keep its old, noncompetitive power plants running.

AEP has publicly committed to achieving net-zero carbon emissions by 2050, with an interim target to cut emissions 80% from 2000 levels by 2030. But those are corporate goals that come out of AEP headquarters in Columbus, Ohio, applicable throughout its 11-state service territory. They obviously don't apply in West Virginia.

Why not? AEP knows that the PSC will approve whatever it wants, as long as it involves keeping coal plants open.

In the period between the PSC's August decision approving AEP's initial request and its new filing in September, Bill Raney, former president of the West Virginia Coal Association, has now joined the PSC as its newest commissioner. If you think that improves

the prospects for the PSC stepping up and protecting ratepayers, I've got a 50-year-old money-losing coal plant to sell you.

No, wait! The PSC already approved those deals when it authorized Appalachian Power to buy Amos (2013) and Wheeling Power to buy Mitchell (2014) from AEP's unregulated subsidiary, AEP Generation Resources. These two plants started losing money for AEP shareholders in the competitive wholesale markets in the early 2010s, so AEP decided to dump them on the backs of the West Virginia ratepayers. AEP executives knew the PSC would approve the deals, and they were right.

Due in large part to bad deals like this, AEP's electricity prices for residential customers in West Virginia have more than doubled — an increase of 122% — between 2008 and 2020. During the same years, West Virginia's electricity prices for all customers have increased at five times the national average. No ratepayers in other states in the country have had their electricity prices increase faster than in West Virginia.

Stop the madness. It's time for the PSC to step up, do its job and act in the best interests of West Virginians, instead of approving whatever the coal industry and the coal-burning utilities want. Even utility regulators in pro-coal Kentucky and Virginia flatly rejected AEP's deep dive into their citizens' wallets.

While it was once said that what's good for the coal industry is good for coalfield states, it is just the opposite that holds true now.

James Van Nostrand is director of the Center for Energy & Sustainable Development at the West Virginia University College of Law and author of a forthcoming book, *The Coal Trap: How West Virginia Was Left Behind in the Clean Energy Revolution*.

**Note: This previously appeared in *The Charleston Gazette*.**

## Abandoned Mine Lands and Infrastructure

Although by the time you read this things may all be resolved and we can go back to thinking about something else, as the *Voice* goes to print big questions of infrastructure hang in the air, big proposals careen around Washington, etc. See the story on p. 7 of this issue.

As that story points out, many of the things proposed will have very real impacts upon environmental protection in West Virginia. One of those (one in which WVHC has taken a great interest in the past) is the Abandoned Mine Lands Program.

The Abandoned Mine Lands Program was set up to fix mines that were mined and abandoned before the Surface Coal Mining Reclamation Act passed in 1977. The federal Office of Surface Mining collects a fee on each ton of coal mined and distributes the money to states to correct unreclaimed mines in that state.

The fee was first imposed in 1977 for a limited time. Every few years it expires; Congress looks to see if there still are unreclaimed mines. If there are, Congress renews the fee.

The fee runs out this year. Its renewal is part of one of the infrastructure packages. If that package does not pass, there will be no money to reclaim the remaining abandoned mines, including several in West Virginia.



Join Now !!!

Name

Address

CityStateZip

PhoneEmail

Membership categories (circle one)

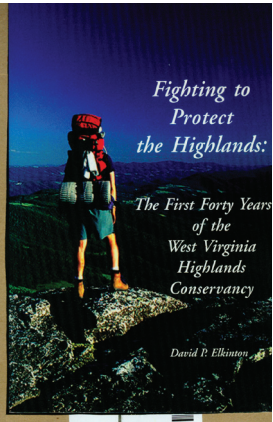
	Individual	Family	Org.
Senior	\$15		
Student	\$15		
Introductory	\$15		
Other	\$15		
Regular	\$25	\$35	\$50
Associate	\$50	\$75	\$100
Sustaining	\$100	\$150	\$200
Patron	\$250	\$500	\$500
Mountaineer	\$500	\$750	\$1000

Mail to West Virginia Highlands Conservancy, P. O. Box 306, Charleston, WV 25321

West Virginia Highlands Conservancy  
Working to Keep West Virginia Wild and Wonderful  
  
You may also join on-line at [www.wvhighlands.org](http://www.wvhighlands.org)

GET A GREAT HISTORY BOOK

For the first time, a comprehensive history of West Virginia's most influential activist environmental organization. Author Dave Elkinton, the Conservancy's third president, and a twenty-year board member, not only traces the major issues that have occupied the Conservancy's energy, but profiles more than twenty of its volunteer leaders.



From the cover by photographer Jonathan Jessup to the 48-page index, this book will appeal both to Conservancy members and friends and to anyone interested in the story of how West Virginia's mountains have been protected against the forces of over-development, mismanagement by government, and even greed.

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](http://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!  
Book Premium With Membership

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.  
Existing members may have one for \$10.00. Anyone who adds \$10 to the membership dues listed on the How to Join membership or on the renewal form will receive the history book. Just note on the membership form that you wish to take advantage of this offer.

Tell a Friend!

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:

Address:

Email

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](mailto: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.

# Book News

## Saying “Yes” to *Saving Wonder* by Mary Knight

Reviewed by Cynthia Ellis

What is the correct term for books for early teens these days? Young adult? Surely not Juvenile?

Whatever it is, this is one. And a pretty good one.

*Saving Wonder* is the debut novel of Mary Knight. She’s not from Appalachia. But she gets it right. Without patronizing or condescending, she gets it right.

She understands and aptly describes mountains and the people and communities there. She recognizes how someone could love a tree...and a mountain.

She obviously loves words. Without pedantry, she makes word study a clever theme in the plot and wows us with her descriptions of places that could be familiar to us.

She also works in the appearance of I ♥ Mountains bumper stickers! Twice!

The main figure in *Saving Wonder* is Michael “Curley” Hines. His daddy died in a coal mine; his mother and

baby brother died as coal sludge swept down a mountain. Curley lives with his Papaw, who sustains and challenges him. Also central to the story is a friend-who-is-a-girl, Jules [Julia]. Curley must navigate his changing feelings, a new kid in town [son of the mine company boss] with an eye for Jules, and threats to something in the community he never imagined losing.

This is a fast read...and a satisfying one. Somehow varied elements including a first kiss, tree-sitting protestors, a kid-produced video that goes viral, and sweet sounds on a harmonica do not get in the way of a fairly believable tale set in Kentucky not so long ago.

The book was published by Scholastic, Inc. and has labels, “appeals to 5<sup>th</sup>-7<sup>th</sup> graders” and “reading level Grade 5.” Some writers of books for kids have the special skills to transcend the boundaries of labels. Mary Knight has those skills.



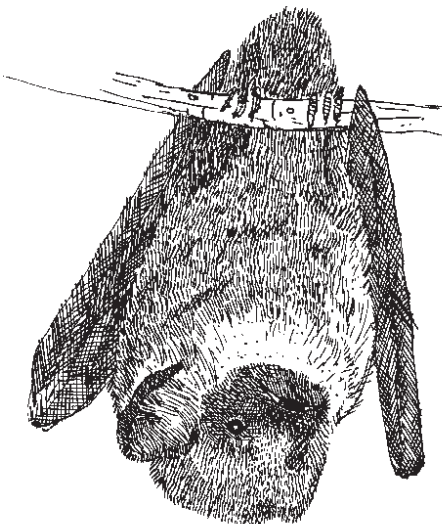
### Bats: Facts and Fiction

Along with ghosts and witches, bats symbolize Halloween. They are mythologized as dark, threatening creatures in the night sky, waiting to swoop and get entangled in our hair and drink our blood. In reality, bats are timid, avoid human contact, and have a tremendously positive impact on our ecosystem.

Bats are nocturnal mammals who can devour up to 3,000 insects in one night, sometimes consuming their entire body weight. They possess “hand wings”; elongated fingers joined together with a tough membrane which enables them to fly, the only mammal to adopt that ability. Bats are not blind and have all five senses, including an ultrasonic bio-sonar capability referred to as “echolocation”, which they use to navigate and catch insects in total darkness.

Besides the high volume of insects, bats consume fruit, nectar, fish, and small vertebrates. One misconception is that all bats are rabid; in fact, studies have shown that less than one percent of bats contract rabies and when they do, they usually die within three or four days. Though they are not aggressive, they can bite in self defense if injured or mishandled. Never pick up a wild bat with your bare hands.

Bats roost during the day and can be seen emerging in droves at twilight, ready for their nightly feast of pesky insects.



### 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](mailto: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.

### 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.



## Book News

### *Organizing to Win*, by Jim Britell

Reviewed by Stewart Acuff

Jim Britell's book, *Organizing to Win*, is an important book for our time. It is an excellent how-to, DIY manual to teach grassroots environmental organizing and to just-getting-started citizen organizers. With micro chapters of one to a few pages, Britell takes us through traditional tactics of grassroots environmental activism and organizing.

From the 21 principles of community organizing, to creating a campaign and organization, to canvassing—what my tradition calls door-knocking—to raising money, lawyers, and legal action, and fighting the Violent Right, Britell guides us through necessary action to save the environment in your place, your piece of Earth.

Because Jim Britell and I come from different organizing traditions and perspectives, we naturally have some disagreements. The only one that matters much is nonviolent civil disobedience. Jim dismisses the tactic as ineffective. On the other hand, I've seen nonviolent civil disobedience work very well as part of a broader strategy in union and civil rights and anti-poverty work. Of course, we all watched as Lakota People stopped the Dakota Access Pipe Line with a rich mix of tactics. Theirs included tapping the power of ancient traditions, courage, and violation of unjust and immoral law.

Like any good organizer turned nonfiction author, Britell writes what he knows. And that is a lot. It's enough to create a knowledge base that can launch widespread grassroots action to protect Earth and her climate and, thus, all humanity.

Britell betrays a consistent organizer's lean ideology or worldview when he contrasts corporate neoliberalism with community organizer Saul Alinsky's perspective: "A central tenet of neoliberalism is a tendency to view the purpose of government in strictly economic terms, and to ascribe the cause of most problems to market inefficiency and too little competition. A defining characteristic of this approach is a reluctance to ascribe the cause of any problem to pervasive and systematic corruption, or the ability of the rich and strong to take advantage of the poor and weak."

"This theory is in sharp contrast to what activists have learned from decades of experience—a worldview best summed up by Saul Alinsky's saying that 'We live in a world of unbelievable deceit and corruption.... Giant corporations are unbelievably oppressive and follow a win-lose philosophy... and will go to any length to make money.'"

*Organizing to Win* is so broad and comprehensive that it covers the most elementary getting-started advice to organizational, agency, and nonprofit management—including human resources. Britell even devotes a chapter to excoriating the Green Party.

Because of his feet-on-the ground, do-it-yourself approach, Jim Britell has done our Earth a great service. It is not at all clear that nation states or national governments can or will exercise enough power to rein in the destructive behavior of unfettered global capitalism that threatens climate, the Earth, and humanity. The best vehicle to ramp up pressure on both governments and corporations is uprisings of average people in community after community around the world, standing against local corporate environmental abuses.

I've read this great book through two lenses: 1) my lifetime as a community, union and political organizer, and 2) my activism in my community's proud, determined, loving, strategic, courageous, vigorous, strong, comprehensive campaign to stop the Danish-owned Rockwool Corporation from building a toxic, perhaps deadly insulation factory in our Appalachian Shenandoah Valley. The factory would burn massive quantities of fossil fuels to melt rocks and

waste to make building insulation.

For four years in Jefferson County, WV we have waged a nonviolent grassroots struggle to protect our people and neighbors and environment from Denmark's Rockwool.

We turned around local politics in 2018, taking seats from Rockwool supporters. We won a huge court case invalidating the first and primary development agreement, but Gov. Jim Justice then substituted his state support and budget for what we defeated locally. We mobilized thousands of everyday folks to jam local meetings, hearings, county commission meetings, and utility commission events and three major demonstrations of strategically targeted nonviolent civil disobedience actions. Some of us even walked across the Zealand Island/Province of Denmark to its Parliament Building in Copenhagen to try to enlist the good people in Denmark to support our struggle.

So far we have yet to succeed in stopping Rockwool or climate change.

Ultimately, humans will destroy humanity with our greed, arrogance, and evil in high places if the people of the world—collectively and through our institutions—don't act to break the power of corporations to break our Earth and destroy our climate. We can all help create the human uprising and movement to save humanity. Reading Jim Britell's *Organizing to Win* is a great beginning.

Stewart Acuff may be contacted at [stewartacuff0180@gmail.com](mailto:stewartacuff0180@gmail.com)

**Stewart Acuff (left) accompanied Shepherdstown resident Tracy Danzey (right), who walked 70 miles in 11 days from Kalundborg to Copenhagen to protest the Rock Wool project**



# The Army Wants You

Or at least the Army Corps of Engineers wants to hear from you about the Mountain Valley Pipeline (MVP). Under the Clean Water Act the MVP must have a permit to cross streams and wetlands. The Mountain Valley Pipeline has proposed some changes in the way that it crosses streams and wetlands in its 300 plus mile trip through West Virginia and Virginia. Because these changes affect its application for a permit, the Corps of Engineers is having two public hearings on November 1, 2021, for West Virginia and on November 4, 2021, for Virginia 6 p.m. to 8 p.m. EST. You may participate either by telephone or by computer.

If there are unforeseen technical difficulties, the Corps will try again on November 9, 2021.

Because the Corps of Engineers is worried about Covid, the hearings will be held online. For more information, including information related to the submission of information via the public hearing, see the September 30, 2021 Public Notice information, at: <https://www.lrh.usace.army.mil/Missions/Regulatory/Public-Notices/Article/2793909/Lrh-2015-00592-gbr-lrp-2015-798-nao-2015-0898/>.

If you want more information about the application, the public notice version of the permit application and appendices are available for public download at <http://www.mountainvalleypipeline.info/news-info/> under the IP Applications tab.

The virtual public hearings will be held on the WebEx virtual platform as follows:

**West Virginia Hearing: DATE:** November 1, 2021, **TIME:** 6 p.m. to 8 p.m. EST

**Virginia Hearing: DATE:** November 4, 2021, **TIME:** 6 p.m. to 8 p.m. EST

Participants may participate either by telephone and/or computer.

**If you wish to provide oral comments on the proposed project you are strongly encouraged to RSVP with your intent to speak at the public hearing to CELRP-MVP@usace.army.mil with the statement “RSVP to Speak at West Virginia Public Hearing” or “RSVP to Speak at Virginia Public Hearing” as appropriate and include your full name, email address, and contact phone number with area code. You may also request an advance copy of any visual presentation material by e-mail to CELRP-MVP@usace.army.mil. If time allows, unscheduled speakers may be allowed to provide oral public comments by following the directions of the moderator. For more information about attending a WebEx event, please visit [https://help.webex.com/en-US/article/8l0y08/Join-a-Webinar-in-Webex-Events-\(New\)#Cisco\\_Generic\\_Topic\\_dita\\_fc78570c-5cf7-403a-a1a1-993a4fd36eb3](https://help.webex.com/en-US/article/8l0y08/Join-a-Webinar-in-Webex-Events-(New)#Cisco_Generic_Topic_dita_fc78570c-5cf7-403a-a1a1-993a4fd36eb3).**

You don't have to go to both hearings. Any comments at either of the hearings will be included in the public record and considered as part of the Corps' decision making.

The public will be able to submit electronic statements through the webinar application beginning at 6 p.m. on the date of each

scheduled hearing respectively. The audio and visual portions of the hearing will also begin at 6 p.m. Attendees may join the conference 10 minutes prior to the scheduled meeting time.

To submit a comment prior to the hearings, send an email to: CELRP-MVP@usace.army.mil with the subject line “**MVP Public Hearing Comment**” and include your full name and contact phone number with area code. All comments received by email prior to the hearings or in the chat during each hearing will be incorporated into the administrative record.

During the virtual hearings, all participant lines will be muted in order to maintain audio quality. WebEx moderators will direct participants when it is their turn to speak. In order to accommodate as many statements as possible, **each person providing an oral statement will be allotted two (2) minutes.**

The Corps plan for the hearing is that it will listen to the oral statements but it wants the real arguments to be submitted in writing. In the public notice it asks that “all important facts and arguments should be submitted in writing.” Written statements may be presented at the hearings or submitted to this office prior to the hearing date. All electronically submitted statements during the virtual hearing will become part of the official record.

If you do not want to attend the virtual hearing, you can submit written comments. All written comments should be submitted electronically **by email at CELRP-MVP@usace.army.mil** by midnight Eastern Standard Time on November 19, 2021. If

you are unable to submit comments via email, they may be sent by the United States Postal Service and postmarked on or no later than November 19, 2021 to the following address:

United States Army Corps of Engineers, Huntington District  
ATTN: CELRH-RD-E  
Public Notice: LRH-2015-00592-GBR  
LRP-2015-798, NAO-2015-0898  
502 Eighth Street  
Huntington, West Virginia 25701-2070.

Please note that names and addresses of those who submit comments, including oral comments, in response to this Public Notice become part of our administrative record, and, as such, may be available to the public under provisions of the Freedom of Information Act.

If you have any questions you can contact Mr. Adam Fannin at 304-399-5610 or by email at [CELRP-MVP@usace.army.mil](mailto:CELRP-MVP@usace.army.mil).

For details on how to sign on to the virtual hearings, go to <https://www.lrh.usace.army.mil/Portals/38/Users/007/87/1287/Public%20Hearing%20Notice%20-%20Attachment.pdf?ver=rsrBLHjJawO-6fikfMvtQ%3d%3d>. It has all the links, access codes, etc. that you will need to participate.



## To Comment on the MVP



## Mon National Forest Hiking Guide

Celebrating the 50th anniversary of the West Virginia Highlands Conservancy, the new edition of the treasured guide to every trail in the Monongahela National Forest features brand-new topographic maps and Kent Mason's gorgeous photos, all in color.

The Guide has been updated with the cooperation of National Forest District Rangers and Recreation Specialists to reflect changes in the past ten years:

- \* newly designated wilderness areas
- \* new trails near campgrounds and sites of special significance
- \* a new complex of interconnected trails on Cheat Mountain
- \* rerouted and discontinued trails
- \* ratings for difficulty, scenery, access to water, and much else

The definitive guide to the Mon adds a wealth of information about history, wildlife, and botany; safety, preparation, and weather; horseback and mountain bike riding and cross-country skiing; as well as sources of further information on the Forest and its environs.

The Monongahela National Forest has long been known as a 'Special Place'. The hiking, backpacking, and cross-country skiing opportunities it provides are among the best in the eastern U.S. New wilderness and backcountry trails have been added to the outstanding areas we have appreciated for decades – Otter Creek Wilderness, Dolly Sods Wilderness, Flatrock Plains, Roaring Plains, Blackwater Canyon, Spruce Knob, North Fork Mountain, Shaver's Mountain, Laurel Fork Wilderness, Cranberry Wilderness -- and there are lesser-known gems to be found in between.

Profits from the sale of these guides support a wide variety of worthy environmental projects for the West Virginia Highlands Conservancy.

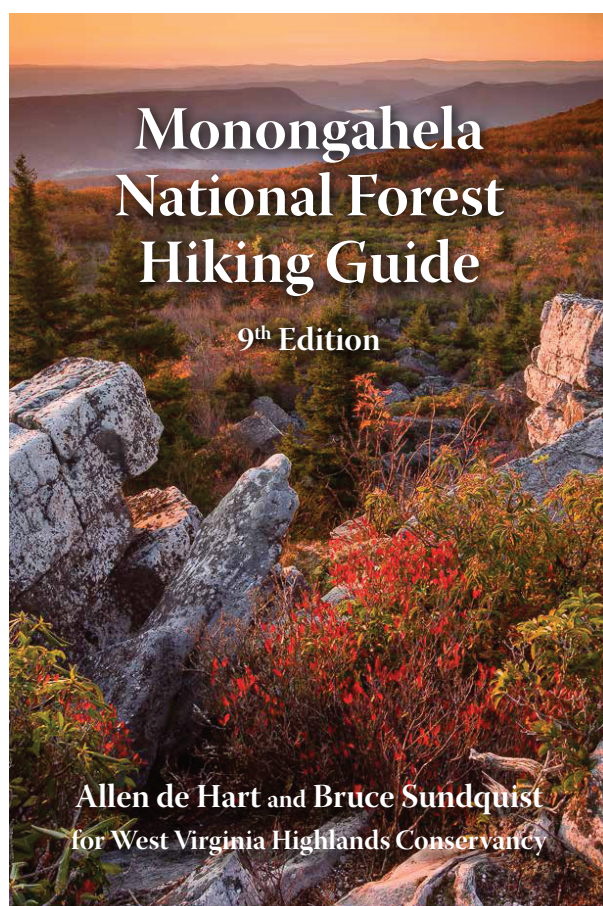
**Send \$18.95 plus \$3.00 shipping to:  
West Virginia Highlands Conservancy**

**P.O. Box 306**

**Charleston, WV 25321**

**OR**

**Order from our website at  
[www.wvhighlands.org](http://www.wvhighlands.org)**



### The Highlands Voice: It's Not Just for Reading Any More

*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](mailto: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.

No matter how you receive it, please pass it along. If electronically, share the link. If paper, hand it off to a friend, leave it around the house, leave it around the workplace. It's not just for reading. It's for reading and passing along.

### 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.)



**A report from a webinar**

# Managing West Virginia's Forests in a Changing Climate

By Cory Chase

Climate change is the elephant in the room with regards to environmentalism. It is undoubtedly one of the most pressing issues we face as a species on planet earth. Forests play an important role in combating this monumental challenge. A changing climate presents many challenges, but also many opportunities.

I recently attended a webinar titled "Managing West Virginia's Forests in a Changing Climate," which was hosted by Northern Institute of Applied Climate Science (NIACS). This organization is "a collaborative effort among the Forest Service, universities, conservation organizations, and forest industry to provide information on managing forests for climate change adaptation and enhanced carbon sequestration." The entire presentation is available online here: <https://forestadaptation.org/learn/managing-west-virginias-forests-changing-climate>

Northern Institute of Applied Climate Science offers climate and carbon services. They provide resources and training to help land managers make climate-informed forest management decisions. They do not make recommendations to land managers. Instead, their workbook provides "structured flexibility" that allows land managers to define, assess, evaluate, identify and monitor their land's needs and management goals...with climate resiliency as an overarching goal.

*American Beech*

The webinar had multiple presenters from United States Forest Service, as well as the Central Appalachian Spruce Restoration Initiative (CASRI), who covered a range of topics like forest resiliency in WV, pest pressures spurred on by climate change, oak forest ecology and fire management, forest hydrology, and landscape planning. As someone who is not a trained scientist, I had to spend some time learning some of the technical jargon. Here are some of the key takeaways from this webinar:

**Patricia Leopold, NIACS:**

- Climate change research describes broad trends but location determines local conditions and management changes the outcome.
- In short, Climate change is a threat multiplier. Climate change is creating:
- Longer growing seasons: 3-7 weeks more. More "false spring" (early bud break and frost damage).
- Shorter winters: greatest loss in Dec. Jan. 15-60 fewer days with snow cover. More rain. More freeze-thaw cycles.
- Increased risk of moisture stress: esp. later in the growing season, drier during the same season. More evaporation from soils, open water, plants.
- CO2 fertilization: Benefits: increased photosynthesis, increased water use efficiency. Limits: varies by species and site, nutrient deficiencies (esp N).
- Changes in suitable habitat: significant loss of Black Cherry habitat, southern Red Oak may climb north, fir trees only go up in elevation, no Northward migration.
- Extreme [weather] Events: more severe and frequent flooding, drought, fires, storms, etc.
- Invasive plants: they will benefit, their range grows with more disturbances, risk is high in areas that have poor forest vigor.
- [www.forestadaptation.org/central-appalachians](http://www.forestadaptation.org/central-appalachians)

**Dani Martin, USFS Plant Pathologist: Insects and pests:**

- Climate-Pathogen model: intensified biological stressors, shorter warmer winters affects insects and they may have more life cycles.
- Climate-Stress model: increased flooding, disturbance, heat stress/drought

- Climate Change Resource Center website shows list of affected species and pests
- Woolly adelgid, oak wilt, beech bark disease: What can we do about it? Monitor (early detection), Forecasting (modeling and risk analysis), tree treatment if applicable.

**Greg Nowacki: Regional Ecologist, USFS Eastern Region: Oak and Fire:**

- Oak is a pyrogenic (fire-dependent) genus. Fire suppression has damaged the species. Shade tolerant species take over (esp maples). Prescribed burn and thinning are two methods to restore oak populations.
- Oak, pine, chestnut and hickory are all widespread pre-settlement. Fire conducive species. Pines selectively removed from 1775-1900. Hardwoods coppicing. Charcoal for iron furnaces. Pig iron. Trees harvested every 20-25 years. Predicated on sprouting.
- Oak leaf curling and aerated ground conducive for fire. Mesophyte leaves don't create those conditions; more matted and wet = less fire.
- "Restoration uses the past not as a goal but as a reference point for the future. If we seek to recreate the temperate forests, tall grass savannas, or desert communities of centuries past, it is not to turn back the evolutionary clock but to set it ticking again." (Falk 1990)
- [www.landfire.gov](http://www.landfire.gov)

**Bryan Swistock: Water resources specialist**

- Bryan has worked on climate change for 15 years. He said that current climate data agrees with theories from 15 years ago.
- Forest Hydrology: hydrologic budget, precip, runoff, recharge, groundwater, stream flow, evapotranspiration. Forest has high evapotranspiration, cropland about 50/50 with stream flow. Pavement has only 10% evapotranspiration.
- Forest = high water infiltration rate. Spongy, absorbs and transmits water in macro-micro pores. Forest can take on ~ 15 inches per hour. High infiltration = subsurface flow.
- Increasing air temp will affect water

**(More on the next page)**



## More about Trees and Climate Change (Continued from previous page)

temps. Affects what lives in streams.

- Brook trout is a cold water species with a tight tolerance of temp changes. Short time period can kill off trout with higher temps.
- Less snow means changing hydrographs.
- Water impacts on urbanized areas will be more extreme but dominated by land use changes.

### Katy Barlow: CASRI/The Nature Conservancy Central Appalachians Program

- Resilient Land: sites that continue to support diversity, productivity and ecological function.
- Species mostly migrating north.
- Climate flow: upslope, downslope and northward.
- Landscape planning for resilience: Connectivity, Biodiversity, Adaptive Capacity
- Connectivity enables species movement for maintaining ecosystems.
- Coal mining is the largest land use change in WV. 1.5 million acres affected.
- Adaptive capacity: intrinsic capacity of a species to disperse genetic materials to a changing climate.
- Genetic diversity in central Appalachia is very low.
- We need to maximize genetic diversity, minimize genetic load, optimize local adaptation. Limited resources means focus on certain areas. (There is hope!)
- [www.maps.tnc.org/resilientland](http://www.maps.tnc.org/resilientland)
- Jack Tribble: District Ranger on the Greenbrier Ranger District of the Monongahela National Forest
- Lots of new science. Deer Creek planning, lots of support. Lambert Run 2016 restoration work.
- USFS does better with input from partners. NEPA process starting at Deer Creek.
- Roadless area, limited access. Wildlife area in management plan. Active management for wildlife habitat.
- Most of Greenbrier District is not hydrophilic forest. It is not a drier area...this is forcing Jack to get into more difficult areas with regards to forest health and big challenges. We have more moisture, more strong floods. High stressors happening.
- [www.adaptationworkbook.org](http://www.adaptationworkbook.org)

As a non-scientist, I had to look up plenty of words to understand these presentations. But even without an education in science, it is clear that adaptability and resilience are crucial for any species to survive and thrive (including homo sapiens). While most of our environmental problems stem from human activity, we don't have to follow that trajectory indefinitely. It is commonly said that knowledge is power, but I have settled on knowledge being potential power: informed action is power. Through scientific research, we can help make informed decisions and participate in a dynamic process with our environment to help create resiliency in our forests and on our planet.

## Roster of Officers, Board Members and Committee Chairs, and Board of Directors

PRESIDENT: Larry Thomas, P.O. Box 194, Circleville, WV 26804, (304) 567-2602, larryvthomas@aol.com  
 SENIOR VICE PRESIDENT: Marilyn Shoenfeld, 167 Balsam Way, Davis, WV 26260, (304) 866-3484, marilyn.shoenfeld@gmail.com  
 VICE PRESIDENT FOR STATE AFFAIRS: Frank Young, 33 Carnian Ford Road, Ripley, WV 25271, (304)372-3945, fyoung@mountain.net  
 SECRETARY: John McFerrin, 202 Van Tassel Court, Morgantown, WV 26508, (304) 291-8305, johnmcferrin@aol.com  
 TREASURER: Bob Marshall, 2108 Emma Road, Kenna, WV 25248, (304)545-6817, woodhavenwva@aim.com  
 PAST PRESIDENT: Cynthia D. Ellis, 3114 Steel Ridge Road, Red House, WV 25168, (304) 586-4135, cindy.ellis.bbc@gmail.com

DIRECTORS-AT-LARGE (Terms expire October 2021)  
 Jackie Burns jackie.burns@frontier.com. 304 866 4093  
 Randy Kesling, 116 Farm Meadow Drive, Bridgeport, WV 26330; (304) 622-5982; rkesling@MA.RR.com  
 Kent Karriker, 344 Harpertown Road, Elkins, WV 26241 (304) 636-8651, bykarriker@suddenlink.net  
 Patrica Gundrum, Charleston, WV gundrum2@gmail.com  
 Jim Van Gundy, 210 Buffalo Street, Elkins, WV 26241, (304) 636-4736, jjvg01@gmail.com

DIRECTORS-AT-LARGE (Terms expire October 2021)  
 George Hack; 510 HANNA RD; Bel Air, MD 21014; 443 742-0463 Ghack102562@comcast.net  
 Ellie Bell, P.O. Box 48 Snowshoe, WV 26209; 304-651-4553 elbell304@gmail.com  
 Rick Webb, 481 Ravens Run Road, Monterey, VA 24465, (540) 468-2881, rwebb.481@gmail.com  
 Hugh Rogers, 531 Moon Run, Kerens, WV 26276, (304)636-2662, hugh.rogers@gmail.com

DIRECTOR EMERITUS: George E. Beetham Jr., 2819 Mt. Carmel Avenue, Glenside, PA 19038, (267) 252-3748, geobeet@hotmail.com

ORGANIZATIONAL DIRECTORS  
 WEST VIRGINIA CAVE CONSERVANCY: Randy Rumer; 295 Caraway Lane Renick, WV 24966; (304) 497-2657; rrumer@frontiernet.net  
 PITTSBURGH CLIMBERS: Buff Rodman, 32 Crystal Drive, Oakmont, PA 15139, (412) 828-8983, buffrodman@hotmail.com  
 BROOKS BIRD CLUB: Cynthia D. Ellis, 3114 Steel Ridge Road, Red House, WV 25168, (304) 586-4135,  
 WEST VIRGINIA RIVERS COALITION Turner Sharp, Box 4751, Parkersburg, WV 26104 Tsharp@suddenlink.net  
 MOUNTAINEER CHAPTER TROUT UNLIMITED Randy Kesling, 116 Farm Meadow Drive, Bridgeport, WV 26330; (304) 622-5982; rkesling@MA.RR.com  
 FRIENDS OF THE LITTLE KANAWHA: Cindy Rank, 4401 Eden Road, Rock Cave, WV 26234, (304) 924-5802, clrank2@gmail.com  
 ALLEGHENY HIGHLANDS ALLIANCE: Vacant  
 SHIVERS FORK COALITION: Jeff Witten, President, 578 Falkner Rd, Elkins, 26241, (304) 362-5330, shaversforkcoalition@gmail.com

COMMITTEE CHAIRS  
 EXTRACTIVE INDUSTRIES COMMITTEE: Cindy Rank, 4401 Eden Road, Rock Cave, WV 26234, (304) 924-5802, clrank2@gmail.com  
 PUBLIC LANDS MANAGEMENT COMMITTEE: Kent Karriker, 344 Harpertown Road, Elkins, WV 26241 (304) 636-8651, bykarriker@suddenlink.net  
 RENEWABLE ENERGY COMMITTEE: Larry Thomas, P.O. Box 194, Circleville, WV 26804, (304) 567-2602, larryvthomas@aol.com  
 LEGISLATIVE COMMITTEE: Frank Young, 33 Carnian Ford Road, Ripley, WV 25271, (304) 372-3945, fyoung@mountain.net  
 ENDOWMENT FUND COMMITTEE: Larry Thomas, P.O. Box 194, Circleville, WV 26804, (304) 567-2602, larryvthomas@aol.com  
 RIVERS COMMITTEE: Vacant  
 HIGHWAYS COMMITTEE: Hugh Rogers, 531 Moon Run Road, Kerens, WV 26276, (304) 636-2662, hugh.rogers@gmail.com  
 CLIMATE CHANGE COMMITTEE: Perry Bryant; 1544 Lee Street, East, Charleston, WV 25311, 304-344-1673, perrybryantwv@outlook.com.

MISCELLANEOUS OFFICES  
 WEB PAGE – DIGITAL PUBLISHING: Dan Radmacher, (540) 798-6683, dan.radmacher@writingleft.com

ADMINISTRATIVE OFFICES  
 MEMBERSHIP SECRETARY: Dave Saville; PO Box 569, Morgantown, WV 26507; WVHC50@gmail.com; 304-692-8118

HIGHLANDS VOICE EDITOR: John McFerrin, 202 Van Tassel Court, Morgantown, WV 26508, (304) 291-8305, johnmcferrin@aol.com

# HIGHLANDS CONSERVANCY BOUTIQUE



- 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
- Soft pima cotton adult polo shirts are a handsome earthtone light brown and feature the spruce tree logo. Sizes M-XL [Shirts run large for stated size.] \$ 25.00, 2XL \$26.50

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](http://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 and the pre-curved visor is light green. 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