

Fresh Air

The Quarterly Newsletter of the Mid-Hudson Group of the Atlantic Chapter

Spring 2022 | Vol. 54 | Issue 1 This newsletter will be posted to our website along with all previous newsletters.

In This Issue

<u>Chair's Corner | Conservation | Energy | Programs</u> Book Review | Fundraising

Sierra Club Board of Directors Election is Underway! Please vote!

The ballots were emailed to all members on March 1.

There are five open positions. Our Atlantic Chapter has endorsed four candidates. Visit the <u>Atlantic Chapter website</u> for more information. Visit the <u>Sierra Club website</u> to learn more about all candidates. The four candidates endorsed by our Chapter are:

Kathryn Bartholomew | Allison Chin | Michael Dorsey | Aaron Mair

Chair's Corner by Lalita Malik

The war waged by Russia on Ukraine has eclipsed everything else that is going on today. The destruction of property, displacement of innocent civilians and loss of life, are all because of one man's desire to claim more and more and more. This unjustified war has led to huge profits for the oil and gas industry as fuel prices rise. This of course hurts the most vulnerable around the world as lower-income citizens have to spend more of their limited finances on energy. All the more reason to move quickly toward clean, renewable energy sources which are more local and so not globally price dependent.

Our fight for the environment and natural resources often seems like a war as well. We have one victory, but soon the problem resurfaces and we must approach it from another angle. There are two problems the Conversation Committee has been focusing on, Dankskammer Energy and Bluestone Wild Forest. The Dept. of Environmental Conservation (DEC) had denied the permit for the Danskammer plant, but Danskammer Energy has not accepted the DEC action and so the battle continues. Check out Nancy Severn's update on the status of Danskammer.

After more than three years of fighting we finally had a victory for Bluestone Wild Forest. The Town of Kingston requested an Environment Impact Statement and the DEC and the Town of Kingston both issued Cease and Desist Directives for destructive earth moving and construction activities taking place on the site without required permits. The developer ignored the rulings and has continued illegal activities. Marie's article describes the situation and our actions to fight it.

Inflation and subsequent increase in gas prices, while painful, have people thinking about ways to reduce their energy costs. Exchanging gas guzzlers for Hybrids or Electric Vehicles is one of the options. So is installing solar panels, signing up for community solar and switching to renewable heat options with Ground Source or Air Source heat pumps. There is some skepticism about reliability of renewable energy and how well these solutions will work in our area.

Nivo's article debunks the myth that renewable energy is not reliable. In the next few months, we will host programs featuring success stories from individuals who have solar panels, are driving EVs, heating with Heat Pumps and are using renewable energy now.

On a lighter note, be an armchair hiker and explore trails through the eyes of Robert Moore's book on trails. Sara Kennedy introduces us to this very interesting book in her review.

Now that COVID restrictions have eased, we are resuming our regular programs. Our first program on the American Chestnut will be on March 29th. Details are in this newsletter as well as being announced via email to members. Please join us and celebrate a new beginning.

Conservation

Mid-Hudson Group Conservation Committee

by Nancy Severns

Danskammer

The New York State Department of Environmental Conservation (DEC) denied the Title V air permit for a 536 mega-watt combined cycle gas plant requested by Danskammer Energy. The permit is required for the repowering of the plant to move forward. Danskammer Energy appealed the decision of the DEC Commissioner. Danskammer Energy contends that the DEC lacks legal authority in this matter and that the decision constitutes a *de facto* ban on new fossil fuel power plants. On February 15, 2022 DEC held a public hearing. The majority of those who commented urged the DEC to uphold its decision.

BlueStone Wild Forest

See the article below by Marie Caruso.

Meetings

The Conservation Committee meets every other month on the third Thursday of the month at 6:30 pm via Zoom. Our members provide updates on four topics (Route 17 expansion, Bluestone Wild Forest, Danskammer, and Wheaton Park). The next meeting is March 17, 2022. Join us! Send an email to Nancy via midbludsonsierragroup@twc.com in order to receive the Zoom link.

BlueStone Wild Forest

by Marie Caruso

The Mid-Hudson Group of Sierra Club funded one of the many studies to help convince the Town of Kingston Planning Board to request an Environmental Impact Statement (EIS) for a proposed concrete and steel plant at 850 Route 28, on property surrounded by the Bluestone Wild Forest. While awaiting that study, the Dept. of Environmental Conservation (DEC) and the Town of Kingston both issued Cease and Desist Directives (as reported in the last issue of Fresh Air) for destructive earth moving and construction activities taking place on the site without required permits.

More recently, Catskill Mountainkeeper (CMK), the Woodstock Land Conservancy (WLC), and three residents of the Town of Kingston, through their lawyer, Claudia Braymer, issued a formal appeal against the determination by the Town Building Inspector that the storage of cranes, other vehicles and heavy equipment there was permissible under the Town's zoning code for a "contractor's storage yard". On February 10, the Town Zoning Board of Appeals (ZBA) held a public hearing on the issue, at which numerous speakers documented the many seemingly illegal activities they had observed at the site. Astoundingly, the

ZBA did not take any corrective action, but simply dismissed the appeal on the grounds that only people who resided within 1,000 feet of the area had standing to appeal a determination by the Building Inspector. At this writing, CMK and WLC are exploring any possible legal actions that could put a halt to the activities taking place at 850 Route 28. And there is still no sign of the scoping document for the EIS that the developer was supposed to produce before altering the site in any way.

There has recently been a development in the membership of the Town of Kingston's Planning Board. John Konior, a staunch supporter of the project, has been removed as Chair and resigned his long-time position on the Planning Board. Dixon Onderdonk, who has been skeptical about the project, has taken his place as Chair. <u>Click here</u> to see the Kingston *Daily Freeman* reporting on this issue.

Your Sierra Club remains committed to fighting these inappropriate construction activities in the midst of the Bluestone Wild Forest. In March, the Mid-Hudson Group Executive Committee voted unanimously to provide some financial support for the legal expenses incurred by CMK and WLC in challenging the decision of the ZBA.

Energy Corner by Nivo Rovedo

Can We Achieve a Clean Energy Future Based on Wind, Solar, and Hydro?

Several weeks ago I happened to have my radio tuned to WAMC, our local NPR station, when their short insert program on the environment (entitled "Earthwise") came on. The segment is always interesting, but this one particularly drew my attention. The subject was a study out of Stanford University addressing the question of the reliability of a grid powered solely by clean, renewable energy from wind, solar, and hydro. I went to the article referenced by the program to learn more. Here is the link.



The segment was based on an analysis done by the Stanford Woods Institute for the Environment, published at the end of last year in Renewable Energy. Spoiler alert: "The paper... finds that an energy system running on wind, water and solar coupled with storage avoids blackouts, lowers energy requirements and consumer costs, while creating millions of jobs, improving people's health, and reducing land requirements." It addresses the fear that a grid based on renewables will suffer blackouts driven by intermittent electrical supplies.

"This study is the first to examine grid stability in all U.S. grid regions and many individual states after electrifying all energy and providing the electricity with only energy that is both clean and renewable," said study lead author Mark Z. Jacobson, a professor of civil and environmental engineering at Stanford. "This means no fossil fuels, carbon capture, direct air capture, bioenergy, blue hydrogen or nuclear power."

The vision being examined is that all cars and trucks would run on electric motors powered from batteries or hydrogen fuel cells, heating and cooling from electric heat pumps, across the electricity, transportation, buildings and industrial sectors in the years 2050 and 2051.

The Concern

The worry in this vision (a future which we must bring about to avoid the worst effects of the climate catastrophe that we are living in) is the reliability of the energy sources: often mentioned are "grid blackouts amid extreme weather events in California during August 2020 and Texas during February 2021 as evidence that renewable electricity can't be trusted for consistent power. Although in both instances renewable energy was not found to be more vulnerable than other sources...."

The Method

The approach of the researchers to studying this was to look at how to "meet continuous energy demand every 30 seconds for two years, using simulations for six individual states — Alaska and Hawaii, which are isolated, and California, Texas, New York and Florida, large states far from each other and subject to different weather conditions — as well as all the interconnected electricity grid regions in the U.S., and the contiguous U.S. as a whole."

So what did the study assume for energy sources? "Their scenarios envisioned a massive scaling up of offshore wind turbines and rooftop solar panels — none of which take up new land — as well as onshore wind turbines, utility solar panels, and concentrated solar power plants. The scenarios also include some new geothermal but no new hydroelectric infrastructure."

This is not an easy endeavor as we have seen from the pushback generated by fossil fuel companies that fund efforts to undermine these goals, climate change deniers who simply refuse to accept the science-based findings, and those that simply do not care and want only to continue our current, insouciant way of life. But it is feasible; we need the will to make it happen.

The Findings

Here are some key results of the study:

- "Overall, they found that new electricity generators would take up about 0.84% of U.S. land versus the approximately 1.3% of land currently occupied by the fossil fuel industry."
- "...per capita household annual energy costs were nearly 63% less than in a business as usual scenario. In some states, costs dropped as much as 79%".
- "The investment cost to transition everything in the U.S. ranges from near \$9 to \$11 trillion, depending on how much interconnection of regions occurs. However, this pays for itself through energy sales and from the cost savings each year compared with not transitioning. In fact, based on energy cost savings alone, the payback time may be as short as five years."
- "Interconnecting larger and larger geographic regions made power supply smoother and costs lower because it upped the chances of available wind, sun and hydro power availability and reduced the need for extra wind turbines, solar panels and batteries."
- "The study also finds that building and operating a completely clean, renewable grid may create about 4.7 million long-term, full-time jobs across various energy sectors, such as construction and component manufacturing, as well as indirect employment at stores, restaurants and other businesses."
- "Cleaner air would spare about 53,200 people per year from pollution-related deaths and millions more from pollution-related illnesses in 2050, saving about \$700 billion per year in health costs"

Despite the price tag, this transition is enticing. Imagine starting to back away from the cliff that is the tipping point for global warming. We would be avoiding deadly droughts, ultra-destructive floods, mass migration to flee such conditions (with the resulting political instability), killer heat waves, super storms, generally crazy weather, species extinction, famines and water shortages.

There is an interesting conclusion regarding power storage. The analysis indicates that long-term battery storage is not needed to maintain grid stability, that short-term batteries (4 hours of duration) would suffice if they are linked together to work in succession (thereby essentially supplying long term power). For short peak power needs in a grid, discharging a group of these batteries simultaneously would provide the stability.

This study's simulations indicate the California and Texas blackouts could be avoided by several means. Just electrifying all energy sectors with clean renewables reduces the overall energy needs in those states, and incentives to shift electricity consumption away from peak periods helps. Energy storage would play a role in this fix. And building out more wind power (using the fact that winds are stronger on average in winter) would help in peak winter heating demands, especially in Texas. California would benefit from offshore wind power to help with summer cooling, as ocean winds are generally fastest in summer.

So, what next?

So all this points to the possibility that we could wean ourselves from burning fossil fuels and help save the planetary environment in a strong way. The question is always whether we have the political will and long-term vision. The article I read concludes with a quote from a coauthor of the study, Anna-Katharina von Krauland: "I suspect that these ideas, which might sound radical now, will soon become obvious in hindsight." Will we and our children look back at this time and strike our collective foreheads, saying "Why didn't we act?"

Programs by JoyAnn Savino

The Mid-Hudson Sierra Club Presents:

The Rebirth of the American Chestnut Tree

Presented by:

Tim Termini from the NYS American Chestnut Foundation

Tuesday March 29, 7:00 pm Boughton Place, 150 Kisor Road, Highland

Tim will be sharing information about the rescue and rebirth of the iconic American Chestnut tree. He will speak about the different seed and seedling programs offered to you, how and where to plant and how to care for them.

The history of The American Chestnut Foundation, is an ongoing pursuit to develop a blight-resistant American Chestnut tree and to restore the tree to its native forests along the eastern United States.

The American chestnut tree was once an essential component of the entire eastern U.S. ecosystem. Chestnut wood was rot-resistant, straight-grained, and suitable for furniture, fencing, and as lumber for building. It was a late-flowering, reliable, and productive tree, unaffected by seasonal frosts. It was the single most important food source for a wide variety of wildlife from bears to birds, as well as feed for livestock.

Tim will be giving away chestnuts so we can all help to bring the American Chestnut Tree back onto our farms, forests and in our own backyards!

There will be lots of material to share!

Seating is limited. Please RSVP JoyAnn Savino: <u>midhudsonsierraprograms@yahoo.com</u> Join us on our <u>Meetup</u> page for more details

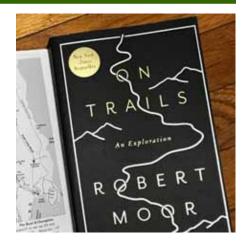
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Book Review by Sarah Kennedy

Robert Moore's book *On Trails: An Exploration* is a breath of fresh air. Moore completed a through hike of the Appalachian Trail in 2009. He chanced upon terrible wet weather for this adventure and his mind wandered as he slogged along the trail. "My memories of the hike consist chiefly of wet stone and black earth. The vistas from many of the mountaintops were blotted out." Although this was not a pleasant journey for Moore, perhaps we are all the better for it as he conceived of the idea for this book during that summer.

Moore has a wonderfully curious mind: he allows himself to pursue questions that occur to him while on the trail, and then to follow up on all the threads he finds during his process of discovery. Throughout, he includes the musings of philosophers, nature writers, anthropologists, ecologists, and historians. He meets these people and he walks with them.



This book is designed as if it was a well-constructed trail. Moore takes us on twists and turns as he meanders through time and place. Along the way, we meet fascinating people and are often surprised by where and how far we travel. Moore includes special viewpoints and stopping points along the way, just as we hope to find along a favorite trail.

In the first chapter, Moore goes to great lengths to view what he believes might be the first trails ever created. He travels to Newfoundland to spend time with paleontologists who are researching the fossilized trails of the world's earliest soft-bodied animals. After studying the fossils, he draws an interesting conclusion: "In the end—or rather, in the beginning—the first animals to summon the strength to venture forth may simply have wanted to go back home."



View of the Bowl and Sand Beach

In looking at the development of trails, Moore looks at the history of our country. He spends significant time on natives' experiences, on their understanding of nature and ecology and on how their trails were developed and understood. For example, he writes "Trailwalking cultures often grow to see the world in terms of trails. The Western Apache believe the goal of life is to walk 'the trail of wisdom,' in pursuit of three attributes...translated as 'smoothness of mind,' 'resilience of mind,' and 'steadiness of mind.'" Thus, time spent walking develops a person's sense of equanimity.

In his philosophical manner, Moore often returns to the concept of wisdom,

including the "wisdom of trails." He writes, "In fact, I would argue that all very old things attain a certain kind of wisdom. There is, if we were to look closely enough, a wisdom of trees and a wisdom of seagrass, a wisdom of mountains and a wisdom of rivers, a wisdom of planets and a wisdom of stars. This book, in its admittedly oblique and winding way, has been a search for the wisdom of trails."



Sand Beach, start of the trail

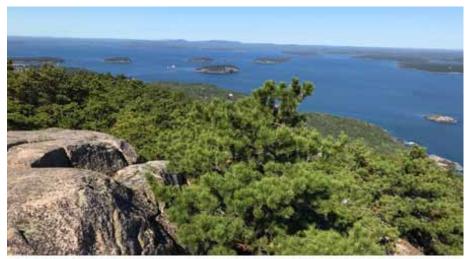
Readers may deepen their knowledge as they read about various places they have visited. For instance, Moore's exploration of Cherokee land in North Carolina reminds me of my own days spent exploring and hiking there. I learned much more about the history of the area, which includes the Trail of Tears. There is also a fascinating section on the Cherokee

language, as Moore spent time with a Cherokee linguist during the course of writing this book.

While in North Carolina, Moore also met a conservationist who was protecting land by finding and documenting ancient Cherokee footpaths. Once documented, the Forest Service is obliged to protect a quarter mile on either side of the trail until archeologists can complete their work.

Historical preservationists help to protect ecologically sensitive areas in the Hudson Valley as well. The Mid-Hudson Sierra Club is currently supporting two efforts which highlight preservation right now. (Please see Conservation section of this newsletter.)

One of the primary joys of this book is that it triggers readers to reflect on the different sorts of trails they have traveled and loved. After much consideration, I believe my favorite trail is up the South Ridge of Champlain Mountain in Acadia National Park. The trail starts at sea level on Sand Beach. Rising through the woods, you walk past the Beehive and then around the Bowl (a small glacial lake where the Hudson River Artist Frederick Church painted). After that, there is a long climb to a false peak with many beautiful viewpoints along the way from which you can identify points along the the shoreline. When you reach the peak, you gain views of the Porcupine Islands in Frenchman Bay, and to the West a glimpse of the peak of Cadillac Mountain. This is the trail I always choose when spending time in Acadia.



View of Porcupine Islands in Frenchman Bay, from the summit

Fundraising by David Friedman

Make A Gift - Make A Difference

Our local group depends on the support of volunteers and the generosity of our membership. The work of the group takes Sierra Club volunteer effort, and of course funds. We hope that you will consider making a gift to the Mid-Hudson group of the Sierra Club. In these turbulent times it's vital that we all do what we can to speak out and work for the protection of our environment and the future of our world. We welcome and appreciate your support, and encourage you to consider providing financial support for our efforts. Our mailing address is at the bottom of this newsletter.

To speak about specific opportunities, or with any questions, please contact David Friedman, <u>Friedman David@msn.com</u> or our Treasurer, George Treutle, <u>georgetreutleo6@gmail.com</u>.

Visit our <u>Meetup</u> website for Programs and Outings Visit our <u>Facebook</u> page Visit our <u>Mid-Hudson Group</u> website

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