



Fresh Air

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

Spring 2023 | Vol. 55 | Issue 1

This newsletter will be posted to our website along with all previous newsletters.

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Sierra Club Board of Directors Election is Underway!

Please vote!

The ballots were emailed to all members on February 28. Your vote must be received by noon (Eastern Time) April 26th, 2023. There are five open positions. Visit the [Sierra Club website](#) to learn more about all candidates.

Chair's Corner by *Lalita Malik*

At our first Executive Committee meeting in January, we organize, look ahead, and set goals for the coming year. But this year we ended up doing something entirely different. And it has been fun.

We were approached by two different groups to support them with issues in their backyard. In Saugerties a mega corporation, KoA/Terramor, was seeking approval for a glamping development on a pristine wooded property with a wetland that extends to adjacent properties. Susan Paynter, a Sierra Club member, approached us to support the Citizens Against Terramor (CAT) in opposing this development. Tom Helling, a new ExCom member jumped in feet first to represent the Sierra Club Mid-Hudson Group in this endeavor. He participated in planning meetings led by Susan and submitted comments at public hearings. We were just gearing up for a long battle, when we had a pleasant surprise. Terramor was no more! Check out Susan's experiences and perspective on the victory, and her plan to help other groups in similar situations.

The small town of Dover is being inundated by triple threats, all disguised as solutions for clean energy. We concentrate on the Iroquois ExC in this edition. Our Energy Chair, Nivo Rovedo, took the lead on this. In addition to submitting comments and attending public hearings, we attended a fun rally at the DEC offices in New Paltz. We were accompanied by musicians, beeping horns, and spirited public comments and chants. Towards the end of the rally, a DEC rep collected our comments. Check out Nivo's account of the proposed projects and what is at stake for the citizens of Dover and neighboring communities.

Chris Parks, a new contributor to our newsletter, has informed us that the cost of renewables has gone down and will continue to fall, whereas the cost of fossil fuels will not follow the same trend. Check out his column in Energy News Central.

In my December column I mentioned the importance of electing representatives at the State and Federal level who will support Sierra Clubs goals. Now it is time to get legislation passed and monies allocated in the State budget to ensure our goals are met. This is accomplished by building relationships, scrutinizing bills, and lobbying efforts. Tom Helling's article describes the process, Sierra Club priorities for 2023, and how you can join the team to make a difference. You will get to meet your reps, visit Albany and see our beautiful capital. Tom and Sarah Kennedy, Political Chair, did just that and presented our elected officers with the award-winning Sierra Club calendars for their offices. Every time they look at it, they will be reminded of the importance of their decisions.

In Kingston, the fight to stop a concrete plant in Kingston has uncovered a gem in the Bluestone Wild Forest. We might soon have a new State and National Historic site in our backyard. Marie Caruso has arranged a [meeting on March 25th](#), for you to learn all about it. Check out her article and join us for this fun meeting.

In her book review of *Underland* by Robert Macfarlane, Sarah Kennedy takes us on a journey through the book as she describes how Macfarlane shifts his attention from mountain peaks to underground spaces. Parallels of beauty underground and above ground, the destruction that humans have caused and continue to do so today, and the role of organizations like the Sierra Club in protecting these environments.

On the coldest day in January, John Rath, our Vice Chair, and I joined members of the Lower Hudson Group to celebrate Transit Equity Day in Cold Spring. We enjoyed a hot lunch, good hikes and formed a partnership with our neighbors in Lower Hudson to participate in their outings. We now have a rich variety of hikes and activities for everyone. Check out our website regularly for new postings and enjoy the beauty of the Hudson Valley.

We also need our own hikes, so we have scheduled a training program for our members to become hike leaders. Read about it below and sign up! Space is limited.

We look forward to meeting you at one of our programs and hikes. 2023 promises to be a fun and productive year.

Conservation by Susan Paynter

Terramor: A Goliath Corporation Withdraws Application

Terramor Outdoor Resort, a subsidiary of KOA, pulled its application to develop a “glamping” site along Route 212 in the Town of Saugerties on 77 acres of unyielding terrain with significant portions of bedrock and wetlands and the home of the American Woodcock and Indiana Bat, an endangered species. The application was pulled one month after ‘Citizens Against Terramor’ (CAT), along with the Sierra Club and several local environmental groups presented convincing arguments opposing the project at a public hearing in January with over 200 citizens in attendance.



The plan, which was pending before the town planning board, was officially withdrawn in a February 8 letter. “After careful evaluation, it was determined that the project did not meet criteria across several key benchmarks to warrant moving forward,” the company wrote.

Glamping, masquerading as camping, is in actuality similar to a five-star hotel spread across multiple acres, fragmenting habitat and devastating wetlands. Zoning codes are being reviewed in communities across the country to address this unique zoning category of the hospitality industry.

Citizens Against Terramor began as a handful of neighbors in April 2022, incorporating and forming a board in July 2022 in order to facilitate decision making and fund raising. The group raised \$69,000 over a period of 9 months and was able to hire consultants and attorneys. In the first weeks of their efforts, the only way the community knew there was an issue was the occasional red and white signs popping up around town with the words #Stop Terramor”.

The concerns of CAT quickly gained momentum to include hundreds of engaged citizens and an online presence rich with documentation and resource materials. As evidence of the devastating impact on habitat became increasingly more apparent, CAT was joined by the Sierra Club, Woodstock Land Conservancy, and the Catskill Mountainkeeper.

Because the development was proposed along the border of Saugerties and Woodstock, CAT attended meetings and shared data at meetings in both towns, ultimately convincing the town of Woodstock to go beyond “home rule” and address the impact on its own citizens and wildlife. When the water treatment site plan was revealed and included pouring effluent into a stream leading to a sacred “baptismal” pond at the Woodstock Jewish Congregation, the WJC took action and encouraged their members to write letters in opposition of the project.

As concerned citizens volunteered via the group’s website and shared thoughtful opinions on FB and Instagram, experts were discovered and brought together as a strategy team. These experts shared data on wastewater, Superfund contamination, well water drawdown, habitat loss, wetland delineation, and recreational smoke, providing the backbone for the presentations before the Saugerties Planning Board. CAT also engaged professionals such as hydrologist Paul Rubin, geologist Katherine Beinkafner, and attorney Meave Tooher. Everyone else was a local citizen who volunteered their time because of personal interest.

Note: Susan Paynter served as president of Citizens Against Terramor and is a member of the Sierra Club. She has been documenting the success of the Terramor effort and will be sharing additional information regarding the process in upcoming newsletter articles and on the Mid-Hudson Group’s website.

Energy Corner by Nivo Rovedo

Iroquois ExC Ignites (Metaphorically) Citizens’ Cause in Dover and Athens, NY

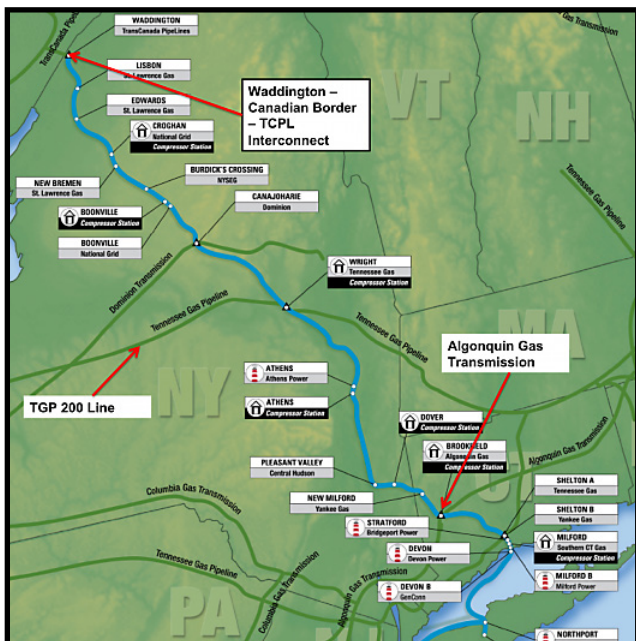
A proposal by National Grid (and Con Ed) to double the fracked gas pressure in the Iroquois pipeline by augmenting the compressor stations that already exist in Dover and Athens, NY has stirred many into action. The project is called “Iroquois Expansion by Compression” or ExC. Ostensibly, this is to feed demand downstream, through southwestern Connecticut to Long Island and into Manhattan. The project is misguided, and the people in the

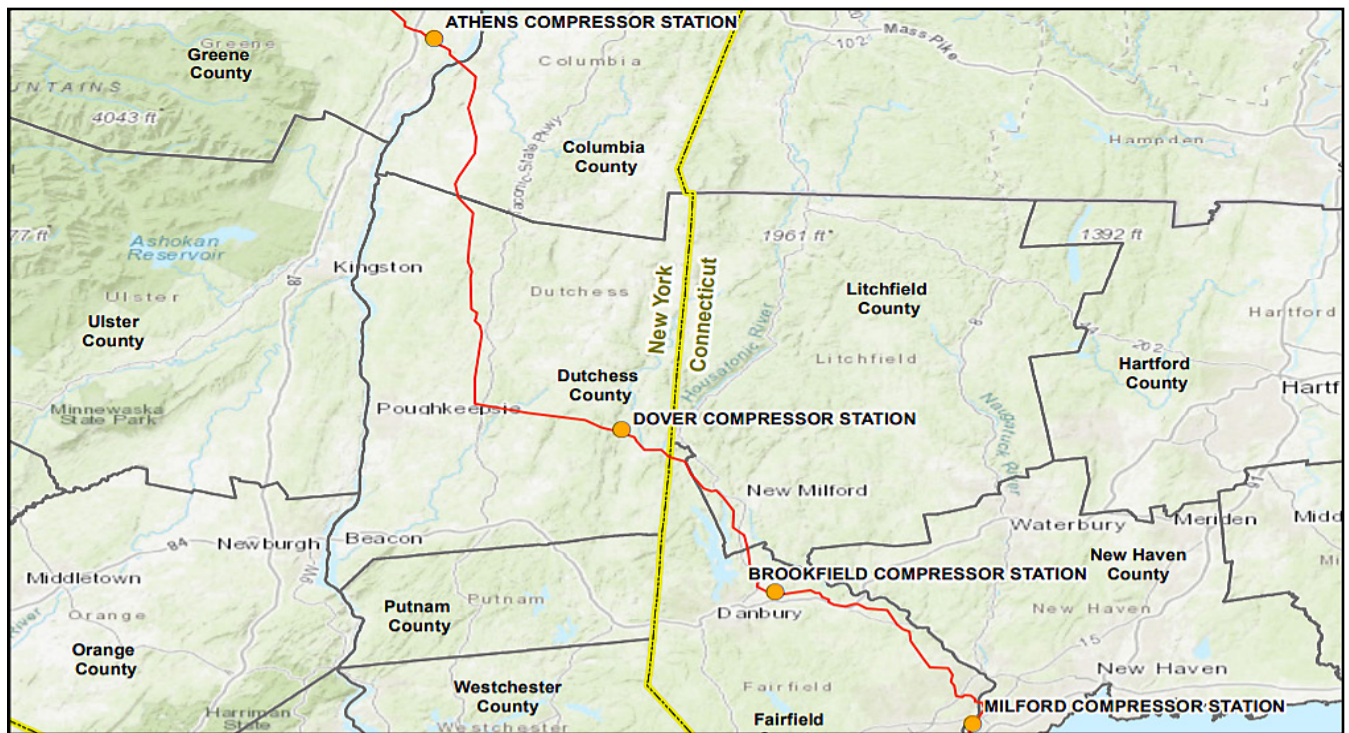


communities where the compressors would be enlarged are opposed. A group of Dover town folk have formed the Concerned Citizens of Dover, and they have marshaled several environmental and justice organizations to help. The Mid-Hudson Group of the Sierra Club is proud to stand with Food and Water Watch, Earthjustice, NY Public Interest Group, Friends of the Great Swamp, Sane Energy, Oblong Land Conservancy, Concerned Citizens of Dover, and others groups rising to stop ExC.

Some background on ExC:

When another proposed pipeline, the Williams Pipeline, was defeated, gas companies suggested that the supply of gas would be impacted as demand increased. While the New York State Department of Environmental Conservation (NYSDEC) determined that the pipeline was “unnecessary to meet New York’s energy needs,” then-Governor Cuomo demanded that utility companies





find alternative ways to provide heat to new customers, and ExC became the alternate proposal. ExC would push more methane through an existing pipeline by raising the pressure in the line, accomplishing this by expanding the pumping substations in Athens, NY and Dover, NY. This methane would flow eventually through Connecticut, Long Island, and into Manhattan.

Why are we opposed?

This incremental investment in fossil fuels is contrary to the goals of the Climate Leadership and Community Protection Act (CLCPA), which seeks to advance renewable energy alternatives and reduce the use of fossil fuels, and do so in a way that protects communities from the negative impact (environmental and fiscal) of fossil fuel energy infrastructure. Investing in the pumping of more methane to southern areas of the pipeline would harm the local environments through which it runs, add to the climate crisis by increasing the emission of greenhouse gases, and potentially lock in a continued reliance on harmful methane gas for many years to come. We must not ignore the science and the obvious weather calamities that occur before our eyes - it is clear that the burning of fossil fuels is contributing to this climate catastrophe. We must take the rational action of curtailing fossil fuel burning rather than encouraging it. Will Rogers is credited with the proverb that appropriately suggests “If you find yourself in a hole, stop digging.”

As mentioned above, the NYSDEC has established that there is no need for incremental gas. In NYC, Local Law 97 with its mandate to increase efficiency in buildings will decrease the need for gas, as will the NYC ban on new building gas hookups. So the assumption that the ExC expansion is necessary to satisfy supply-and-demand is not accurate. Pursuing this is irrational, unless the intention is to lock-in fossil fuel usage for decades to come.

The environmental degradation resulting from the proposed augmentation of the gas flow are many and well-documented. It is clear that the ExC project would only inflict greater harm to the health, well-being, and quality of life of the residents in these local communities.

- The Federal Energy Regulatory Commission confirms that this project WILL increase greenhouse gas emission. The inevitable leakage of methane from the infrastructure is some 80 times more potent a greenhouse gas than CO₂ in the short term, and the additional release of atmospheric CO₂ from burning the methane further exacerbates global warming.
- There would be frequent and very loud “blow downs” to relieve pressure in the pipeline, releasing gasses which can affect the health of both residents and the environment.

- The expansion of the pumping stations could cause the increased release of amounts of NO₂, CO, volatile organic compounds, formaldehyde, and particulate matter into the air. It has been determined that exposure to these chemicals can cause respiratory and cardiovascular diseases, neurological and immunological diseases, developmental disorders and cancer.
- Compression station explosions and fires represent an ongoing threat.
- There are concerns that the pipeline may not be fit for increased pressure given its age.

In addition to the unquestionable ecological consequences that would result from increasing the methane flow in the ExC proposal, the project presents negative impacts in terms of community degradation as well. A key principle of the CLCPA is to provide environmental justice by protecting communities, particularly those already considered disadvantaged, from further ecological harm. Dover is a community that would bear an inequitable degree of the harm this project represents, and they are already facing challenges associated with toxins in their environment. Dover Middle/High School's well is currently contaminated with Perfluorooctanoic acid (PFOA) and Perfluorooctane sulfonic acid (PFOS), and has been issued a "do not drink" order by the NYS Health Department. These compounds may be carcinogenic following prolonged exposure to relatively high levels.

There is no upside to this project for the local community, as economic benefits would be few. There would be little in the way of tax revenue increase as the compressor station footprint would not change, and the temporary jobs will likely go to out of state workers, with few local hires. Investing today in fossil fuels as they are declining render them "stranded assets" and represent a future economic burden on all consumers.

Your Mid-Hudson Group of the Sierra Club joins with the other groups in asking the New York State DEC to reject the Iroquois Expansion by Compression proposal by denying the required air permits, for all the reasons presented above:

- The health and well-being of the local residents,
- The goal of our State is to move away from fossil fuel use as outlined in the CLCPA, and
- To avoid adding incrementally to the climate crisis.

Your Mid-Hudson Group has posted this information on our website, under "Take Action", and asked members to write the DEC, providing text examples and facts to use; we have emailed our members on the topic to ask for awareness and action; Executive Committee members have testified against ExC at a virtual DEC hearing on the topic; we have sent our opposition comments in writing to the DEC for the record; and ExCom members have participated in a rally at the New Paltz headquarters of the DEC on February 22, to speak and stand with those seeking environmental justice and a livable future for our planet.

The question remains: Will the DEC act rationally?

Energy News Central by Chris Parks

"Scanning Energy News So You Don't Have To"

Are you interested in how renewable energy is faring? If so, there is much news in this sector. The central fact is that there's an astonishing drop in renewables prices! The grand picture is that Solar, Wind, and Battery prices have been falling like stones, echoing computer chips. The principle that is in play here, formally known as Moore's Law (in the realm of semiconductor chips) or Wright's Law, is that renewables' costs fall exponentially with installed capacity. These laws are fancy terms for the learning curve effect: the more times a task has been performed the less time is required on each subsequent iteration.

Fossil fuel prices have no learning curve and prices stay high. The change is so dramatic that we can think of "pre-2019" and "post-2019" eras. In the 40 year "pre" era, the world invested budgetary rounding-error amounts (0.3% of world gross domestic product GDP) into renewables. In the "post" era, coal and other fossil fuels are becoming stranded assets, as investment approaches 1% of GDP. In his extraordinary review article "[Why did renewables become so cheap so fast?](#)" Max Roser charts the spectacular drop in Solar, Wind, and Battery prices, versus stagnating fossil fuel prices.

The International Energy Agency, BloombergNEF, and Ember project astonishingly high wind and solar growth rates. Ember, for instance, extrapolates out to 1600 GWatt renewables by 2030. The actual installed capacity each year makes the prior year's forecast obsolete. China achieved a \$380 billion investment in clean energy in 2021. The article "[Major Solar Projects List](#)" presents wonderful interactive maps of 6000 installed/planned US solar projects summing to 181 GWatts.

In 2022, the New York State Governor announced 120 solar and wind projects under development that will provide 14 GWatts of clean power to the grid. About 9 GWatts of NY offshore wind is part of a 30 GWatt East Coast package. 22 large scale solar and storage projects were announced in June 2022. Electrical utility solar sign ups sum to 4.2 GWatts, with about 180,000 individual entries. 2022 was stuffed with major announcements!

In summary, an exponential drop in renewables prices is driving the astonishing growth of renewables globally and locally. Stagnating at 0.3% of world GDP in the 40 years since the 1979 Charney Report on global warming was written, investment has grown to almost 1%. According to the 2022 McKinsey report, renewables investment needs to be 7% if Net Zero is to be achieved. We have a way to go, but the fantastic news is that after 40 years' wait, the train seems to be finally moving out of the station!

So, it seems that the free market and rational thinking should finally bring about an embrace of renewable energy as being less costly than fossil fuels, being sustainable, and helping humanity climb out of the climate crisis hole we have dug ourselves into with the burning of fossil fuels. But logical thinking and rational behavior can be victims of misinformation provided by entities with hidden, selfish and harmful agendas. An example is the group Citizens for Responsible Solar, which is fighting against solar farms on rural land, depriving ranchers and farmers of a needed lifeline in leasing their land, and preventing society in general from the benefits of renewable power. You can learn more about this in this [article](#) from NPR/Floodlight.

Will we be intelligent enough to embrace the great saving benefit of propagating renewable energy installations, thereby reining in the fossil fuel burning, and reject the disinformation from those with an interest in the status quo? Let us hope so, but also let us act to bring this about.

Legislative News *by Tom Helling*

March is budget time in the New York State legislature, and there is no more important budget period than the first year of a new legislature. The Mid-Hudson Group's district is represented by both returning and new legislators, and given committee assignments, legislators within our Group's area are especially important contributors from a Sierra Club perspective. The next six months from March to September 2023 is anticipated to be the most active period in terms of developing new and funding existing legislation.

Roger Downs, the Atlantic Chapter's Conservation Director and key lobbyist on behalf of the Sierra Club in Albany recently chaired an annual Lobby Training event. In this meeting, he and other Chapter leadership discussed best practices for Club members interested in participating in the legislature lobby effort, and which legislation would be of particular interest and focus from a Club perspective in the coming months.

The Chapter makes access to the "best practices" and key Sierra Club information in approaching the lobby effort pretty easy. On the Chapter website you will see a [Legislation tab](#) across the top of the page. On this page you can find a [Lobby Toolkit](#), a listing of [Legislative Priorities](#), recent communication ([Budget Testimony](#)) from the Chapter to the Senate and Assembly, and a long history of Bill Memos ([here is the file from 2022](#)) written by representatives of the Sierra Club Atlantic Chapter over the course of time. These memos help to frame the opinion in terms of support or opposition to a variety of established bills, as well as proposed legislation by the Chapter. If you have any interest in understanding how a bill becomes law, and the part that the Atlantic Chapter plays in this process, this represents great reading!

The Budget Testimony letter offers insight as to the key legislation and legislative efforts from a Sierra Club perspective over the coming months. While the budget is largely focused on bills recently signed into law and also others in the process of becoming law, in this cycle there may be no budgetary item more important

than the funds earmarked to support the Climate Leadership and Community Protection Act (CLCPA), which was signed into law in July of 2019. This landmark legislation commits the State to a zero emissions grid by 2040 and near carbon neutrality by 2050. To achieve these goals, a large number of programs and policies must be funded, and further legislative action taken. Given it has taken the legislature three and a half years to get to this point with little real action, we are at a critical juncture if these goals are to remain relevant.

To give you an idea of the breadth of the legislation that contributes to achievement of our climate goals, here is a sampling of the key areas of focus detailed in the Budget Testimony letter:

- Adequate funding and staffing of the Department of Environmental Conservation (DEC)
- Increasing the Environmental Protection Fund
- Funding of New York State's Water Infrastructure Improvement Act
- Support for the Waste Reduction and Recycling Infrastructure Act
- Addressing toxic chemicals in consumer packaging materials
- The cleanup of toxic PFA chemicals in community water supplies and soil contamination
- Overuse and misapplication of pesticides
- Increasing building sustainability by electrifying and phasing out fossil fuel heating alternatives
- Advancing a Cap-and-Invest Program for New York State
- Support of a Climate and Community Protection Fund (consideration for new legislation)

One of the key action items in pursuing and successfully impacting these goals and objectives is building good working relationships with key members of the legislature and their staffs. As mentioned, we have an especially important group of legislators in the Mid-Hudson Group area. Roger Downs identified two specific committees as critical in terms of success in meeting Sierra Club goals – Environmental Conservation, and Energy – and these committees exist in both chambers. Legislators in both the Senate and Assembly in our district play key roles on these committees.

In the Senate, **Michele Hinchey** represents District 41 and a large portion of the Mid-Hudson Group area. She chairs the Agriculture committee, but also sits on both the Environmental Conservation and Energy committees. Senator Hinchey has been a strong supporter of Sierra Club goals and values over her time in public service.

In the Assembly within the Mid-Hudson territory there are three legislators of great importance. **Didi Barrett** represents District 106 and she is the chair of the Energy committee and sits on the Environmental Conservation committee. Assemblymember Barrett has been a consistent supporter and champion of Sierra Club goals over her terms in office. **Sarahana Shrestha** represents District 103 and sits on the Energy committee. Prior to her public service, Assemblymember Shrestha was a climate organizer, so her support for Sierra Club goals runs deep. Assemblymember **Jonathan Jacobson** represents District 104, and while he sits on neither the Energy or Environmental Conservation committee (he chairs the Subcommittee on Election Day Operations and Voter Disenfranchisement, and sits on six other committees), his support for Sierra Club goals has been consistent as he enters his third term. Not surprisingly, the Sierra Club has endorsed all four of these legislators, several across their multiple terms in office.

If you are interested in participating in the legislative and/or political activities of the Sierra Club, please visit the [Legislation page](#) of the Atlantic Chapter's website.

Programs by Marie Caruso

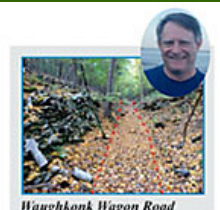
Bluestone Wild Forest Program Saturday, March 25, 11:00 am

Location: Unitarian Universalist Congregation of the Catskills,
320 Sawkill Road, Kingston, NY, 12401

NEW FINDINGS that could put
Bluestone Wild Forest on NY State &
National Registers of Historic Places
with Paul Rubin

SAT MARCH 25TH • 11AM
Unitarian Universalist Congregation of Catskills
320 Sawkill Road, Kingston NY
or join us online

Register: CatskillMountainKeeper.org



Sponsored by your Mid-Hudson Group Sierra Club, the Mid-Hudson Chapter of the Adirondack Mountain Club (ADK) and the Climate Action Team of UUC

Learn about the unique historical and geological features of a part of the Catskill Forest Preserve that, for the past three and a half years, has been the focus of protection efforts by the Sierra Club and other environmental groups (Catskill Mountainkeeper, Woodstock Land Conservancy, ADK, Friends of Bluestone Wild Forest). The event is free and open to the public. Refreshments will be served. [More information](#).

On Sat. morning, March 25, Paul Rubin of HydroQuest will do a photographic presentation, in person, on the special features of the Bluestone Wild Forest, which he discovered while doing hydro geological studies in the area. These features will form the basis for the nomination of the “Hemlock Historic Quarry District” within the forest to the National Register of Historic Places. Just a week earlier, Paul is due to present these findings at the annual meeting of the Northeastern/Southeastern Section of the Geological Society of America. The presentation will also be available for livestreaming, with [pre-registration](#) at Catskill Mountainkeeper.



Teamster with wagon load of bluestone en route to Fitch Brothers dock at Wilbur some 7 miles to the southeast

According to the New York State Office of Historic Preservation, the area is significant “...for its potential to inform our understanding of historic bluestone quarrying methods and the organizational principals that characterized this industrial site.”

This popular hiking and kayaking area (the area includes Onteora Lake) between Woodstock and Kingston has been the focus of attention in recent years because of the negative impacts posed by a proposed concrete and steel manufacturing plant on a site surrounded on three sides by the

forest. Those plans seem to be on hold, as the developer has not yet submitted even the first phase of the Environmental Impact Statement required by the Town of Kingston, although the site continues to be used for storage of heavy machinery and construction materials. Inclusion of the forest on the National Register of Historic Places would further strengthen the case against the proposed manufacturing plant.

In April, Bluestone advocate Sharon Klein, under the auspices of ADK, plans to lead a hike in the area with Paul Rubin highlighting some of the features he has discovered. Further details to be announced via email.

Do you enjoy hiking and planning hikes?

If yes, we have an opportunity for you to train to become a Sierra Club hike leader and lead hikes for our members. The training is in two segments. The first segment is an online course prepared by Sierra Club which will take you through all aspects of planning an outing, publishing it, sign ups and leading outings. You can do this online course at your own pace.

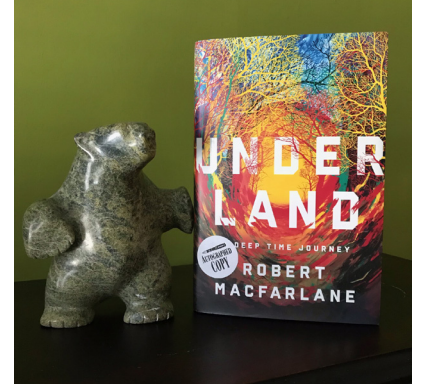
The second segment will be field training with the instructor and your fellow members in training. The first of these training sessions is scheduled for April 22nd, at Franklin D. Roosevelt Home and Library, in Hyde Park. We will have a Zoom meeting prior to the in-person training to discuss logistics.

Register [here](#). After you register, you will receive a link to access the online course. Please sign up for the training and become a bona fide outing leader for our group. An outing can be a day of photography, bird watching, hiking up a mountain, kayaking a creek, or walking an estate - whatever you want to share.

Book Review by Sarah Kennedy

Robert Macfarlane was attracted to mountain peaks, and great windswept vistas when he was a young man. His first award winning book was published in 2003. It is entitled *Mountains of the Mind: a History of a Fascination*. While I have yet to get to that book, I expect to, given my love for his seventh and most recent book *Underland: A Deep Time Journey*.

In *Underland*, Macfarlane explains the shift in his attention from mountain peaks to underground spaces with a quote from a poem written late in life by William Carlos Williams. “The descent beckons / as the ascent beckoned,” Macfarlane writes: “It has taken me until the second half of my life to understand something of what Williams meant. In the Underland I have seen things I hope I will never forget — and things I wish I had never witnessed. What I thought would be my least human book has become, to my surprise, my most communal. If the images at the center of much that I have written before is that of the walker’s placed and lifted foot, the image the heart of these pages is that of the open hand, extended in greeting, compassion or the making of a mark.”



The book, *Underland: A Deep Time Journey*, scares me. Macfarlane is concerned with the issues we all face living in what is now termed the Anthropocene. This term came into use to capture the fact that it is actions of human beings which are shaping the environment on a global scale. Macfarlane writes this is “an epoch of immense and often frightening change at a planetary scale, in which ‘crisis’ exists not as an ever-deferred future apocalypse but rather as an ongoing occurrence experienced most severely by the most vulnerable.

Time is profoundly out of joint — and so is place. Things that should have stayed buried are rising up unbidden.”



Boxwood formation, Wind Cave National Park (Black Hills of SD)

I found myself holding my breath, feeling nervous and constricted as Macfarlane describes his exploration of underground spaces. These spaces include naturally occurring glaciers, caves and passageways, some of which are ancient chambers used by early people, and others man-made spaces used for various purposes, including scientific study, and the disposal of nuclear waste.

This book is, in part, a description of Macfarlane’s explorations in many different locations of the world. He first travels near his home, through various parts of Britain. He then goes to Paris, Italy, and the Slovenian Highlands. He eventually

ventures north to Norway, Greenland, and Finland. He develops and enhances his thinking with lots of reading, including of a scientific nature, literature, and history.

This book explores a surprising, always fascinating, variety of topics. There are passages about aspects of human history, geology, caving, environmental catastrophes, ubiquitous plastic waste, the oil industry, the immense and strange world below Paris, burials, myths, ecosystems such as the understory, and glaciers, with a bit of physics thrown in for good measure.

I am in awe of this book. Alongside all the existential dread, and the bursts of adrenaline we feel as we read accounts of travel below ground, there is a great deal of beauty here. Macfarlane’s descriptions of the natural world are extremely evocative. As he emerges from underground spaces, we see the world anew right along with the author. “Four Kestrels, strung in a ragged low line above the moor to my west, hold their positions



View upon resurfacing from the depths of Wind Cave

with grace against the wind. I gorge on the glut of light, the fetch of space. Reaching a jumble of boulders I stand on the highest stone, face east and lean a little in the wind, feeling the push of its hand on my chest — holding me in part-flight, kestrelling me.” Brilliant.

And enjoy these brief descriptions of the landscape. They are interspersed throughout a conversation about an underground temple in England that was devoted to a mystery cult spread by the Roman Empire: “Grasshoppers crackerjack away from each pace.”

“Lucian and I rest companionably in the cool, listening to the landscape’s

undersong: clack of the train track, road-hum below it, buzz-saw of grasshoppers from the scrub.” “Rasp of grasshoppers, burr of bees, scent of herbs. We walk on towards the tinfoil sea.”

Woven throughout are issues we confront through our engagement with the Sierra Club. “Our modern species-history is one of remorselessly accelerated extraction, accompanied by compensatory small acts of preservation and elegiac songs. We have now drilled some 30 million miles of tunnel and borehole in our hunt for resources truly riddling our planet into a hollow Earth.”

Describing our modern place in the long history of this planet, in this Anthropocene Era, Macfarlane addresses how difficult this is to speak about at all: “It is, perhaps, best imagined as an epoch of loss — of species, places and people — for which we are seeking a language of grief and, even harder to find, a language of hope...We speak an eddying speech, cloyed to the point of congealing...Often it felt easier to say nothing: or rather, to observe but not to try to understand.”

But, understand and speak we must if we are to strive to leave this a better place for those who are to come. Sierra Club provides us with support, camaraderie, and a structure within which to do this important work.

Fund Raising 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, FriedmanDavid@msn.com or our Treasurer, George Treutle, georgetreutle06@gmail.com.

Visit our [Meetup](#) website for Programs and Outings

Visit our [Facebook](#) page

Visit our [Mid-Hudson Group](#) website

Contact Us

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Mail: Mid-Hudson Sierra Club, PO Box 1012, Poughkeepsie, NY 12602

You can find the names of our Executive Committee members on our website:

Go to our [Contact](#) page

If you no longer wish to receive our Newsletter by email you can unsubscribe by sending an email request to Dave Thomas at dave@davidalexanderthomas.com.



SIERRA CLUB
ATLANTIC CHAPTER

Mid-Hudson Group