

SSAFE Newsletter

Senior Stewards Acting for the Environment



In This Issue

Earth Week Education



Disappearing Insects

How to save this vital link in the ecosystem.

A More Sustainable Transportation Future

EVs are the present. Next comes a vision for shared transport.

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SSAFE newsletters can always be found at [SSAFE.org/newsletter](https://ssafe.org/newsletter)



The current transmission structure is inadequate to meet the coming power demand.

Is the Grid Ready for the Rush to Electrify?

By Fritz Gick, former staff at Kendal at Hanover

As the world races to meet the Paris Agreement climate goals by transitioning to clean energy sources, there's no doubt that much progress is being made. However, as this race keeps speeding up, many are confused by the complexity of the issues. For example, what is the grid? How does it work? Is it really outdated? What are the challenges we face with the grid, and what are our solutions?

The national electric grid is a huge web of wires and power stations that distributes electricity to every building throughout the country.

cont'd p.2

Electrification (cont'd)

It allows electricity to be generated in one location and be delivered to many locations around the country instantly, providing a reliable and efficient way to power our daily lives. The electricity made by the spinning of a wind turbine in Nebraska might be the source of your water being nice and warm for washing the dishes, or a coal plant in Maine could be what is powering your lights this instant. Truth is, it's all a mix of sources, but it all moves on the same wires that you see along the road no matter where you are.

If you have heard anything about the grid, the largest piece of infrastructure in the country, it is that it is “outdated”—and there is some truth to that. Many of the wires used to bring electricity from the power plant to your refrigerator were built in the early 1900s but were meant to be replaced around the 1950s. Many of them are still here today, withering away. What is the impact of this? Why haven't they been replaced? The stark reality is that if we add more and more users and producers to the same lines,



*Workers repairing transmission lines in Bryan, OH.
Source: American Public Power Association.*

electricity will start leaking out of these wires. This would result in repeated power outages in many areas. One reason they haven't been replaced is that many of these wires are underground. Replacing them would be very costly and could result in frequent roadblocks. Another major threat to the grid is increasing demand year by year.

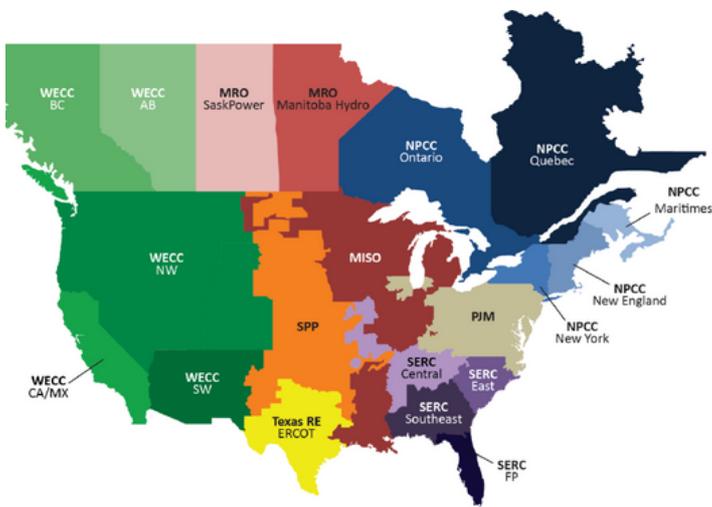
"...as renewable energy gets cheaper by the day, more investors flock to its fruit."

Luckily, both of these issues can be solved in one fell swoop. As aging power plants are replaced with more powerful and cleaner ones, the power lines can be replaced at the same time, creating lots of jobs in the process. The only downside—as with anything—is cost. On the upside, electricity—especially that from renewable energy like wind and solar—is getting cheaper than ever. Renewable energy is more affordable to produce than fossil fuels. It does not require a fuel source, so the more we build, the cheaper it gets. We can run the entire country with renewable energy by 2050 and it could pay itself off within 10 years. All that is missing right now is the political will to do so. The thing that got us into this mess to begin with—money—will help us out of it too. The effects of global climate change are very expensive, and as renewable energy gets cheaper by the day, more investors flock to its fruit. And with investors and money, so flows political will.

cont'd p.3

Electrification (cont'd)

But it will not be easy. Moving to an entire grid that is renewable over the next 27 years will be expensive and a massive undertaking. But we are not known for shying away from such tasks. The national grid did not appear overnight by the work of only one man. The interstate highway system was not built for free. We did not put a man on the moon because it would be easy. The internet did not change our world just because one person wanted to send an email. These were all large and expensive infrastructure projects that we rely on today in one way or another. We happily built these massive projects before, and we will enthusiastically build many more. Preserving our future depends on it.



The North American electric grid is made up of several distinct "interconnections" that shift energy according to areas of greater and lesser need. Source: NERC.

Fritz Gick provided wait staff services for Kendal at Hanover for over 6 years. In April he gave an educational presentation to residents on the electric grid. Fritz is looking forward to his senior year at the University of Vermont, where he is majoring in mechanical engineering.

Undoing the Bottleneck on Permits for Renewables

By Ted Wolner, Chair, SSAFE Advocacy Team

Improvements to the electrical grid need permits from local, state, and often federal authorities before work can begin. The permitting process, while necessary and important, frequently adds extra expense and creates bottlenecks that delay time-sensitive projects by as many as six years.

Removing unnecessary delays and prioritizing clean energy projects is critical to meeting our climate goals in time.

While many of us advocate for more renewable energy sources, few realize that we already have enough clean energy projects *planned* to meet our climate goals, but they are stuck in an increasingly long queue waiting to be plugged into the aging electric grid.

In addition, many more transmission lines are needed to carry the renewably generated electricity from the rural areas where the largest solar arrays and wind farms are located to cities that need this electricity.

It is imperative that local and state-level bureaucratic red tape be reduced, and equally important that communities located near planned projects are both heard and protected.

The SSAFE Advocacy Team will continue to monitor permitting legislation and provide opportunities to advocate for responsible permitting reform.

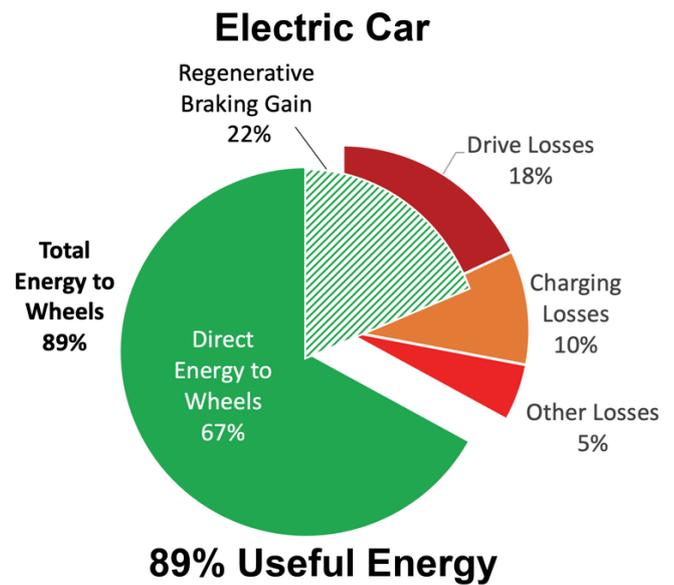
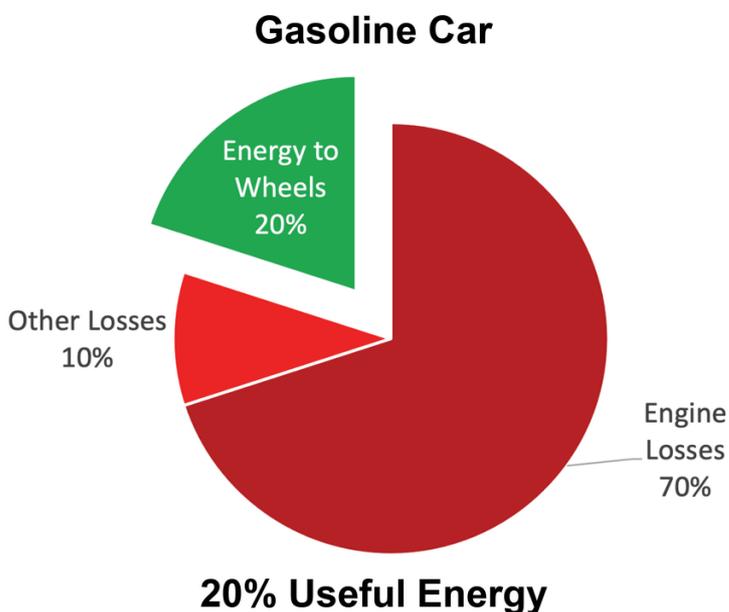
Check [SSAFE.org/action](https://ssafe.org/action) for current advocacy actions.

SO WE BOUGHT AN EV... NOW WHAT?

By Warren Gifford, Kendal-Crosslands Communities

When my wife and I moved to Crosslands two months ago and plugged in our Tesla, we discovered to our dismay that we couldn't charge it at our assigned carport due to an electrical circuit problem, nor could we charge when our neighbor was charging his EV because he's on the same circuit. And we were not alone—there were others on campus with similar situations. Maintenance says it will cost \$5,000 to fix our problem, but even more to fix each of the others. This seems to be the result of an aging infrastructure, not only here at Crosslands but also across communities nationwide, unable to cope with an increasing demand for electricity. If so, what can be done?

First of all, we have to stop burning petroleum as quickly as possible in order to curtail the emission of greenhouse gases. Transportation accounts for 69% of the petroleum we burn and is the most inefficient sector of the economy, wasting 80% of the energy it uses.



EVs don't use petroleum and are 3 to 5 times more efficient than internal combustion vehicles, so they are our best near-term solution. Clearly, it is vital to deploy EVs *now*.

Secondly, we have to rethink how we get around. In the U.S., we think of EVs as cars, trucks, and buses. In India, over 1 million EVs were sold in 2022: 63% were 2-wheeled, 32% were 3-wheeled, and only 4% were 4-wheeled. Overhead weight is a key culprit in vehicle efficiency. Electric scooters and bicycles are 20 times as energy-efficient as electric cars. Walking and biking don't use any electricity at all.

Finally, shared mobility provides another opportunity to implement a more efficient approach to transportation. For example, one lane of cars can only carry up to 1,600 people per hour. A 2-way protected bike lane could carry 7,500 people per hour, and a sidewalk, 9,000 per hour.

cont'd p.5

Bought an EV (cont'd)

Electric buses and trolleys in dedicated lanes could carry up to 25,000 people per hour. It may take some time, but this could catapult us into a much more sustainable future—one that lessens per person demand for electricity.

Walkable cities are good examples of a more sustainable approach to transportation. Inside neighborhoods, people walk, bike, and use other efficient modes of transportation. To get between these neighborhoods, shared transport can move people and goods. One challenge of current public transport is accessibility for people with mobility challenges, and also for people with bicycles and scooters. The shared mobility vehicle concept illustrated below solves these problems by using ramps in the front for rapid entry and at the rear for rapid exit. These vehicles can connect together to form continuous convoys for even faster, more efficient, and flexible shared mobility.

I'm optimistic that we can manage a transition in transportation that is sustainable and energy-efficient, but it's going to take a lot of work—and imagination—and the will power to change.

Yes, people are going to have to move to something radically different when it comes to transportation. In fact, things are changing already as we find solutions to our energy needs that free us from fossil fuels. My wife and I know about change because we have embraced it in moving here. Now it's time to roll up our sleeves and get to building the transportation future our grandchildren deserve.

Warren Gifford has coauthored the book *Driving Tomorrow: Our Roadmap to Sustainable Transportation, Infrastructure and Cities*. He can be reached at warrengifford@gmail.com.

Shared Mobility Concept Vehicle



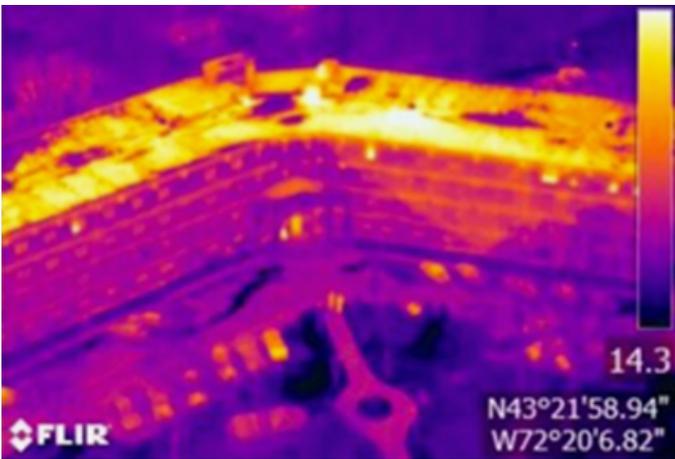
THE HANOVER ENERGY AUDIT OWES ITS SUCCESS TO TEAMWORK

By Margaret Clark, Kendal at Hanover

Stu White described the initial steps in Kendal at Hanover's energy audit in a previous issue of the SSAFE newsletter. Crucial to the success of each stage of this process has been cross-strata work and communication.

Our Energy Audit Sprint Team (EAST), consisting of three administrators and three residents, was charged with formulating a request for proposal (RFP), interviewing, and recommending consultants. The SSAFE team's draft RFP was the thorough and invaluable RFP model we used. The consulting firm we chose believes in the importance of sharing and soliciting information through an initial charrette with the resident community, and then explaining their results in a gathering afterwards, thus engendering resident understanding of and support for their work.

The consultants then pulled together extensive information from our facilities department and welcomed residents'



*An infrared photo showing heat loss through the roof.
This is not Kendal at Hanover.*



Paul Leveille from Resilient Buildings Group, Inc. conducts a blower door test to determine air leakage.

questions and curiosity as they gathered their own data. They had a team of two people over several days using a blower door and HVAC testing system to analyze rates of air exchange around campus. As well, they collected images during a predawn drone flyover with an infrared camera to show levels of heat loss through all of the roofs on campus. The consultants are now processing this information and plan to submit a final report by the end of June, which will include recommendations, estimated costs, and life cycle-cost analyses.

Then the next phase begins—prioritizing the audit recommendations and sourcing potential funding for the necessary projects. EAST has been asked to continue to work through these crucial next steps, as collaboration and open communication have been so core to success and support throughout this process.

Download the SSAFE Energy Audit RFP at SSAFE.org

WHAT'S HAPPENED TO ALL THE INSECTS?

By Chris Sheppard, Kendal at Ithaca

Remember windshields plastered with insects after a long drive? When was the last time you experienced that? Some insect species, like monarch butterflies, are closely monitored, and steep population declines have been documented, attributed to habitat loss, climate change, overuse of pesticides, and even light pollution. We don't have data for most insects, but it is increasingly evident that they are vanishing too. In some places, insects have decreased by as much as 80% over just a few decades.

We don't usually recognize how vital insects are to our lives (it doesn't help that we grow up thinking of them as "creepy crawlies" and things to squash). Consider pollinators. A pollinator moves pollen from male plants or plant parts to female plants or plant parts (some plants have both male and female characteristics). As they do this, they collect nectar and pollen as food. While a few plants are wind-pollinated, most crops, shrubs, trees, and other plants could not produce seeds, and therefore offspring, without pollination. Without pollination, our habitats would start to vanish almost immediately.

When we hear "pollinator," we tend to think "honeybee," but there are many types of pollinators, including butterflies, moths, beetles, bumble bees, solitary bees, wasps, and even bats and birds. Many plants depend on specific pollinators; honeybees, not native to the U.S., can't replace them. Loss of habitat results from replacement of native plants by lawns and



The coneflower is a major draw for pollinators like this butterfly.

by horticultural varieties that often don't supply the resources insects need.

But pollinators are the stars of the insect world. Most work in less glamorous jobs, decomposing plant matter, consuming carcasses, turning over nutrients as part of a never-ending but critical cycle. They help create our soil. Insects are fundamental as food for birds, amphibians, and many other creatures, including each other! The more we know about them, the more fascinating they are.

So what can we at Kendal do to support insect populations? Some facilities have already started, with pollinator gardens in Ithaca and low mow areas at Oberlin. We need to reduce (and ideally eliminate) our use of herbicides and insecticides, which directly impact not just insects but other wildlife and ourselves. We need to plant flowers, shrubs, and trees instead of lawns and accept a few dandelions! Ultimately, this means accepting that we are part of nature, not apart from nature.

THE BATTLE AGAINST INVASIVES: WEED WARRIORS IN ACTION

By Dorothy Yuan, Collington, a Kendal Affiliate

The Collington Life Care Community, established in 1988, consists of cottages and apartments situated within 125 acres of open space carved out of wooded land. Dwellings are connected by covered walkways and surrounded by a paved perimeter trail as well as a 2-mile unpaved trail. In the course of building the complex, a number of berms were retained, allowing many cottage residents to have a view of the fauna and flora from their windows or patios. When Prince George's (PG) County constructed Collington Lake within the complex, a volunteer group, Trail and Lake Subcommittee, was created to oversee planting of perimeter vegetation and to protect nearby trees from beaver damage.

The 66-acre woodland is populated by mature trees, including maples, black locust, sweetgum, beech, oaks, tulip poplar, hickory, and sycamore. A nearby hickory has even been designated as a Champion Tree by the PG County Parks and Recreation Department. Unfortunately, over the years, many trees have been invaded by vines, the most visible of which are bittersweet and poison ivy. Volunteers in the community began to tackle these vines by cutting them at the base and pulling down the unsightly hairy growth that often reached treetops. Occasionally human strength had to be augmented by tethering vines to a pickup truck for pulling. Because some of the wooded area was previously cleared for tobacco farming, the subsequent emergence of new



Left: Collington Weed Warriors removing invasive undergrowth. Right: The resulting open area.

undergrowth and saplings had to compete with non-native plants. As the attention of volunteers became more focused on invasive removal around the trails, the name of the volunteer group was changed to Weed Warriors. Since 2017, some 10 or so members have met routinely each week to aid in this effort, even during days when the temperature dipped below 30°F or soared above 90°F.

The most common invasive vines include oriental bittersweet, wisteria, grape vine, honeysuckle, and mile-a-minute. Other species which compete with native plants include multiflora rose, euonymus shrub, and thorny olive. Invasive trees, such as Callery or Bradford pear and Tree of Heaven (*Ailanthus*), that compete with native trees often had to be cut down with a chain saw. Some invasive plants such as celandine, garlic mustard, lespedeza, and stiltgrass are more difficult to manage because the use of herbicides has been kept to a minimum.

cont'd p.9

Weed Warriors (cont'd)

To replace trees in areas of the woods where they have become sparse, the community has financed the planting of some 40 trees—saplings as well as more mature versions.

East and north of the campus runs the Bald Hill Branch of the Patuxent River. This is a favorite haunt of beavers who have built a dam using local trees. Weed Warriors have enclosed many lower trunks of susceptible trees with wire. To allow easy access for viewing beaver activity, Weed Warriors have cleared out a trail and built a small bridge to allow crossing of a branch of the creek in order to complete a walking circuit.



Weed Warriors building a bridge to allow easy access for beaver viewing and to complete a walking circuit.

This active group of Collington volunteers is guided by a triumvirate—Liz Barbehenn, Brian Dennis, and Evan Davey, with occasional advice from our resident naturalist, Alice Nicolson, and Grounds Committee Chairman, Charlie Clapper. They identify work areas and teach newcomers how to identify invasive growths. The continuous hard work of this group ensures a healthy, viable woodland for future generations.

No Way to Treat a Mother

My restless offspring, what must I do
to get your attention? Shrug quakes?
Blow squalls? Cry floods? Spark fires?

Nothing moves you. You seep noxious gas
into my greenhouse, unleash fossil fuels,
belch murderous methane from red meat,

assume we'll all live forever. As for me,
I'm but a blue marble in space –
a celestial body with blackened lung.

For eons I awaited your birth, a mere
sixty thousand years ago. Despite spans
of sienna sunsets and starry nights,

you turned against me, averted eyes.
Read my vital signs: shortness of breath,
rising temperature, blood pressure.

Still I tilt and spin for you. Don't wait
until I am on life support.

Do something.

Betsy Cullen

Kendal-Crosslands Communities

Earth Day, 2023



SUCCESSFUL EDUCATION DURING EARTH WEEK

By Barbara Smith, Kendal at Longwood

I'm a member of the SSAFE Education and Advocacy project teams. I also have a strong interest in preventing damage to the ocean ecosystems that will happen as early as 2024 if nothing is done to halt industrial deep sea mining.

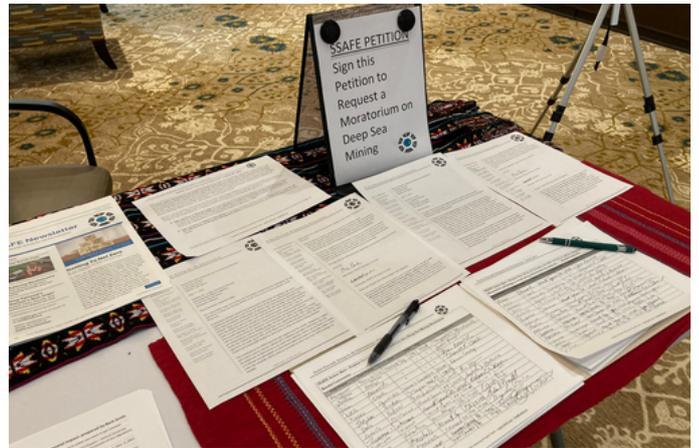
I was asked to develop an educational program to undergird SSAFE's advocacy program calling for a moratorium on deep sea mining. The goal was to collect hundreds of signatures urging the International Seabed Authority and Elon Musk, CEO of Tesla, to support a moratorium on deep sea mining, until such time as it could be done without irreparable damage to the ocean flora and fauna.



A bloodybelly comb jellyfish is one of many endangered deep sea creatures. Source: Monterey Bay Aquarium.

Since the issue is not commonly understood, I requested a spot on our evening educational programs calendar. I then developed a PowerPoint presentation to provide critical background information. I also showed two videos in which scientists explained the perceived need for the minerals to be mined, as well as the irreparable damage mining would cause if prior research were not allowed.

In my presentation, in addition to information on the issue, I pointed to the urgency of our action and why we targeted the individuals we did—Musk can find minerals for EV batteries elsewhere!



A table display encouraged residents to sign petitions.

I set up a table display to reinforce the presentation, with educational materials, an extensive resource list, a poster showing deep sea life, enormous mining machinery, and the mining process. The table also contained copies of the two letters and the petitions to sign. The display stayed open the day after the presentation so Zoom viewers could sign. Almost all 120 residents who came to the program signed both letters.

Go to [SSAFE.org/deep-sea](https://ssafe.org/deep-sea) to learn more and view these recommended videos:

- "Mining the Deep Sea: The True Cost to the Planet," by The Economist
- "The Secret Race to Buy the Ocean Floor," by DW Planet A

SSAFE is Expanding

By Mary Lindley Burton, Chair, SSAFE

I was delighted to be asked to share news and thoughts with you, the SSAFE community of 572 and counting. In March, we held our first Board retreat to take up a dream many of us have had since our inception: expanding to Continuing Care Retirement Communities (CCRCs) outside the Kendal family. Guided in our deliberations by Dr. Sharon Daloz Parks, we determined we were ready for a roll-out of our three-strand model (Advocacy, Education, and Greening), and will begin having conversations with a small group of CCRCs this summer. Our goal is to learn from working with three CCRCs to ensure we have the requisite volunteer leadership and staffing for a larger expansion.

"...we determined we were ready for a roll-out of our three-strand model..."

We would not be here without the support of so many of you—those who made our hiring of Michelle Goodwin as our first full-time employee possible; those of you designing SSAFE processes; those of you working on your respective campuses to give us real-world case studies to share.

Rest assured that all of the Kendals involved since that winter of 2020 will remain ever engaged with SSAFE. We have experienced the benefits of collaboration, of sharing best practices across our campuses, of supporting one another as we surmount roadblocks to reaching the Paris Agreement goals of 50% carbon reduction



The SSAFE Board met in March 2023 to discuss the expansion of SSAFE.

by 2030, 100% by 2050. As always, if you'd like to be more engaged I urge you to reach out to the Board member at your Kendal or to Michelle. You will find a role suited to your interests and available time. You'll meet an amazing group of volunteers around the country. And I guarantee your life will be enriched.

SSAFE Board Members

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Ted Wolner, Vice-Chair
Scot Drysdale, Treasurer
Lynn Williams, Secretary

George Alexander, Kendal at Longwood
Dulany Bennett, Kendal at Hanover
Kamala Brush, Lathrop East
Abbie Fassnacht, The Admiral at the Lake
Bob Gettings, Kendal at Lexington
Ben James, Crosslands, Cartmel, Coniston
George Kriebel, Lathrop North
Chris Sheppard, Kendal at Ithaca
Henry Thomas, Collington
Ted Wolner, Kendal at Oberlin

Wrapping Up



Nature display at Kendal at Hanover created by Mary Ann Cadwallader for Earth Week.

The newly updated photo album at SSAFE.org/earthday provides inspiration and ideas for *any* day of the year. A goal of the SSAFE Education Team is to encourage activities that not only mitigate climate change but also inform and inspire fellow residents to take similar action.

The SSAFE Education Team meets on the 3rd Thursday of each month at 1:30 p.m. Eastern on Zoom to share ideas on educating residents about climate change, the environment, biodiversity, connecting to nature, and maintaining hope in a rapidly changing world. Join us!

Email info@ssafe.org for more information.

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32 Penn Road, Apt. 419
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SSAFE uses these funds to support efforts such as guiding senior living campuses to net-zero emissions, climate advocacy, and climate education. Senior Stewards Acting for the Environment (SSAFE) is a 501(c)(3) nonprofit corporation. EIN: 87-1229514.

SSAFE Climate Cafe

Join us for a light and lively discussion on Zoom.

Wednesday, July 12th
1:00 p.m. Eastern
12:00 p.m. Central

We will be discussing a lighthearted film perfect for summer viewing, "Dare to be Wild," about landscape architect Mary Reynolds and her unconventional entry in the world-famous Chelsea Flower Show.

Go to SSAFE.org/cafe to sign up!



SSAFE Newsletter

This newsletter is a publication of SSAFE, a non-profit organization comprised of residents from Kendal senior living communities. SSAFE has no official affiliation with the Kendal Corporation.

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Submissions & Comments

We want your feedback! We're always looking for good stories to provide inspiration to other senior living community residents. Send us your articles, ideas, questions, or comments!

We'd love to hear from you—drop us an email at info@SSAFE.org