

SSAFE Newsletter

Senior Stewards Acting for the Environment



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Celebrate Earth Day!



Carefully calculating each Kendal's carbon footprint is a key step in getting to net neutrality.

Enhancing Biodiversity

COP15 strives to protect remaining wildlife and our habitat.

Doug Tallamy's "Nature's Best Hope" Native trees, shrubs, and pollinator plants are key.

Interested in learning more?

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Getting To Net Zero

By Dave Henderson, Stu White, and Larry Daloz, Kendal at Hanover

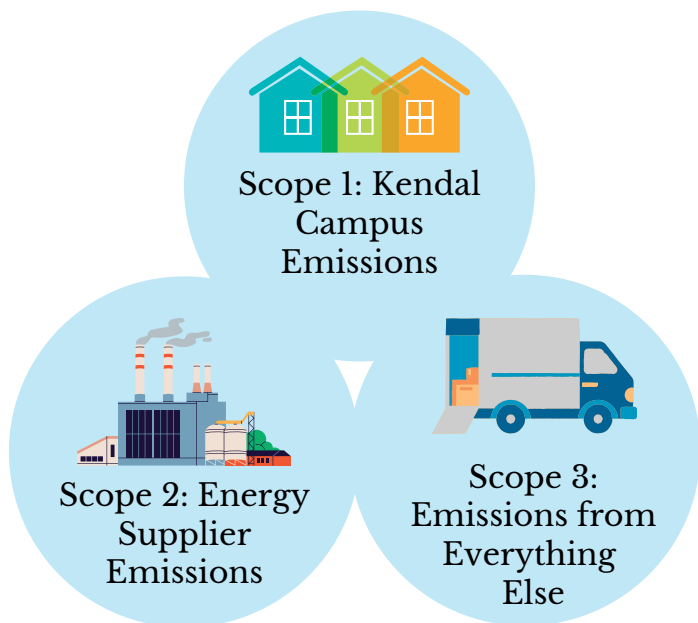
In 2015, the 194 parties of the International Panel on Climate Change (IPCC) formally committed to achieving a 50% reduction in carbon emissions by 2030 and a 100% reduction by 2050. Shortly after SSAFE was formed 5 years later, our first concrete action was to circulate a formal letter from 500 residents to Kendal Corporation requesting, among other things, that they support and encourage each Kendal affiliate to set carbon reduction goals in alignment with the IPCC, thereby achieving net carbon neutrality no later than 2050. While our reach still exceeds our grasp, we have learned a great deal since then about how important this gesture is, and how challenging it will be to achieve.

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Net Zero (cont'd)

Getting to net zero sounds so simple. All we need to do is replace our fossil fuel-burning heating systems with heat pumps, pop some solar panels on the roof, double our insulation, and buy all electric vehicles. In fact, this would not get us close to net zero. So while many of us have embarked on those very important first steps by addressing the emissions emanating directly from our campuses, we have only begun a very long journey.

As you see in the diagram below, climate engineers have described three types of emissions (called Scopes) that we must navigate in our quest for full carbon neutrality.



Scope 1 includes those direct greenhouse gas emissions that come from sources controlled or owned by an organization. For example, we burn fossil fuels on our campuses, including natural gas, propane, gasoline, and fuel oil. Constructing and

maintaining campus buildings accounts for a significant amount of CO₂ emissions as well. This means that an aggressive program to retrofit existing buildings is required at Kendal affiliates to reduce energy use. A professional energy audit will identify how this can best be done. In addition to directly addressing the climate problem, this must be seen as an investment that will return value over decades. Consider that in 2040, roughly two thirds of today's buildings will still be standing. Retrofitting them as we go will create a much lower carbon footprint than building new. But time is not on our side, noted Ed Mazria, CEO of "Architecture 2030," who said: "Current data from the scientific community has made it clear that 2030 is too late. To meet the 1.5°C carbon budget, all new buildings and major renovations must be designed to be zero carbon today."

Scope 2 emissions include those from all places where we buy energy. Mostly, this is electricity we purchase from our local utility, which relies on a mix of sources like coal, natural gas, nuclear, and renewables. But it also includes the emissions of the company that manufactures the solar panels, for example, that we hope will get us to net zero in Scope 1. This means we have to look at where we buy things and ensure that the suppliers of energy are also meeting zero-emissions standards. Moreover, as residents switch to electric vehicles, a system to store local solar power in residents' cars at night could also be effective. Utilities are already

cont'd p.3

Net Zero (cont'd)

implementing this type of system, so it's nothing novel.

Scope 3 is where things get even harder. Basically, everything we buy from laundry detergent, food, and linens to appliances and building materials for renovations must be produced in a way that meets the net zero standard. Scope 3 even includes things like travel by employees commuting to work or going on business trips. And all that we discard—every bottle, can, food package, general trash, food waste, and even our sewage—must be processed or recycled in a net zero manner. The technology for this is still in its infancy. Only 9% of plastics we turn in to be recycled are actually recycled. Billions of dollars are being invested to open plastic recycling plants in the next few years. Some will convert the plastic to fuel; other will convert the plastic into materials to make new plastics. In principle, net zero would be a truly circular economy with minimal inputs of petroleum.

We all want our Kendal affiliates to reduce their carbon footprints, and this system allows us to mark our progress toward the IPCC goals. While much of our focus is now on Scope 1, it is vital to remember that this is just the beginning of the process. Every action we take makes a difference for better or worse, and in the best tradition of Kendal, we have a deep practical and moral responsibility to educate and advocate at all three levels to come as close as possible to the 2050 goal of carbon neutrality.

Off and running—Kendal at Hanover kicks off a new energy audit

By Stu White, Kendal at Hanover

In June, 2022, the Kendal at Hanover Board, with resident input, agreed to support a comprehensive energy audit for addressing the global climate crisis.

They appointed the “Energy Audit Sprint Team” (EAST), made up of equal parts administration and residents, which produced a Request for Proposal.

A highly regarded regional consulting firm submitted an outstanding proposal, the utility contributed a fifth of the cost, and a “charrette” to solicit comments from residents was held on February 23, 2023.

A final report, expected in April, 2023, will detail the audit findings and recommendations, including estimated construction costs and Life Cycle Cost Analyses.

We are on our way!



A charrette held at Kendal at Hanover.

To learn more about resident-driven energy audits, email info@ssafe.org.

"WHEN ARE WE GONNA GET THERE?"

Steve Woodbury, Collington, a Kendal Affiliate
Chair, SSAFE Carbon Footprint Work Group

How many times have we heard that question? To answer it, we need to know where we're going, but we also need to know where we are now. And how fast we're moving. And whether we're going in the right direction.

We're talking about carbon footprint (where we are now) and net zero (where we're going), of course. Why *carbon* footprint? Carbon dioxide—a greenhouse gas—is a leading contributor to global warming. The term *footprint* is a handy metaphor for the total greenhouse gas emissions—most of it carbon—coming from the activities of an organization.

We need to know what our carbon footprints are now at each of our Kendal campuses if we are to eventually achieve net zero carbon emissions. And we need to measure whether we're making progress along the way in reducing them.

So... can't we just add up the energy we use on campus from our utility bills and figure out our carbon footprint? We just need to get the utility bills. And figure out how much of our electricity comes from coal-fired plants, and from natural gas-fired plants, and from nuclear plants, and from wind turbines. And then multiply those figures by how much carbon dioxide each of them releases per kilowatt-hour of power. Okay... maybe not so simple.

Fortunately, SSAFE is making it easier. In January of 2022, SSAFE formed a Carbon

Footprint Work Group. Residents from several Kendals have been working to calculate a carbon footprint for their campuses. And we have been learning as we go, and sharing information, and working to maintain a common approach.

The Work Group decided to focus first on energy use (mostly Scope 1 and Scope 2 emissions—see cover article). We are using the Portfolio Manager program developed by the Environmental Protection Agency (EPA). EPA has built in all the conversion factors, so we just enter the utility bill information and our location, and Portfolio Manager will calculate the carbon footprint for that energy.

And the good news is, when we took stock at the beginning of the year, we are making progress.

- Longwood and Crosslands have utility data for 2019 and 2020. They have done a rough spreadsheet calculation of carbon footprint but not yet entered their data into Portfolio Manager.
- Collington has entered almost two years' worth of electricity and natural gas data into Portfolio Manager, as well as some diesel and propane data. They have run preliminary reports for total Greenhouse Gas emissions from buildings and for energy use per square foot.

cont'd p.5

When are we... (cont'd)

- Kendal at Lexington has collected their electricity data from March 2021 to present.
- Kendal at Hanover has entered utility data for electricity, propane, and fuel oil from 2019 through November of 2022, and for water for the last year, into Portfolio Manager and has generated some carbon footprint data.
- Kendal at Oberlin has calculated their carbon footprint using an earlier spreadsheet model.
- Lathrop East is exploring how to use utility data from a 2020 study, “Design for Carbon Footprint Reduction at the Lathrop Community,” conducted by a team from Smith College and ERS Consultants.

Our work so far has focused on energy use. In the future, we will need to look at other emissions, particularly Scope 3 emissions. What about the gasoline burned by our landscaping contractor’s lawn mowers and leaf blowers? What about staff commuting? What about the carbon impact of the food we purchase? Do our woodlands and our composting give us some carbon sequestration credits?

The Carbon Footprint Work Group will be around for some time, and we won’t run out of challenges. We’re here to help Kendal campuses figure out “When are we gonna get there?”

Celebrate Earth Day!



What is your campus doing for Earth Day, Week, or even Month?

Our dear readers likely remember the first Earth Day in 1970 instigated by Senator Gaylord Nelson, the junior senator from Wisconsin. Driven to action by a massive oil spill in California, he announced a teach-in on college campuses to the national media. It was determined that April 22, a weekday falling between spring break and final exams, was the best date to maximize student participation.

"Today, Earth Day is widely recognized as the largest secular observance in the world, marked by more than a billion people every year as a day of action to change human behavior and create global, national, and local policy changes." - EarthDay.org

SSAFE provides materials such as flyers, fact sheets, petitions, and other educational materials for Kendal Earth Day organizers. Visit our website, [SSAFE.org/earthday](https://ssafe.org/earthday), for ideas and photos of Earth Day activities at Kendal campuses in the past. Email info@ssafe.org for additional information.

ADDRESSING THE BIODIVERSITY CRISIS

By Barclay Ward, Kendal at Hanover

In the small hours (about 3:30 am) of Monday, December 19, 2022, the United Nations 15th International Conference of Parties to the Convention on Biodiversity—COP15—concluded its work in Montreal. A major goal of the group is to protect 30% of the earth's land, oceans, and coastal areas through effective management and conservation. This would almost double the land area now protected and greatly increase protected marine areas. Indigenous peoples are given significant attention in the final report of the conference, mentioned 18 times.

Among other goals, COP15 also called for reform of environmentally harmful government subsidies and disclosure by large transnational companies of practices impacting biodiversity. By 2025, wealthier countries are to provide \$20 billion per year to poorer countries to protect biodiversity, and then by 2030, \$30 billion per year. The targets are ambitious. Not to be too pessimistic, but it must be noted that none of the targets set by the previous conference has been met. There is no formal, centralized monitoring system; each country simply reports on its own progress. As is always the case, the devil is in the details and the execution.

Multilateral diplomacy is a complicated business, and its features do not always lend themselves to quick and decisive action. Decisions are taken by consensus, and the usual process of reaching agreement is that nothing is agreed until everything is agreed. Yet, it can—and in the case of COP15 has—set standards for action. Much of the real progress of protecting biodiversity is most likely to come from smaller groups of



A speaker at the 2022 UN Convention on Biodiversity (COP15).

states, such as the European Union. Nongovernmental organizations can play a significant role in encouraging compliance with the targets.

This Convention has nearly universal membership, with 196 parties. Only two states are not parties, the Holy See and the United States. The Convention was opened for signature in 1992. The United States signed in 1993. President Clinton submitted the Convention to the Senate for its advice and consent, and while it was supported by a majority, Republican opposition prevented the Convention from receiving the necessary 67 votes. The principal objections to the Convention seemed to be that it infringed on U.S. sovereignty, put some commercial interests at risks, and imposed financial burdens. Although not a party to the Convention, the United States remains a signatory.

Meanwhile more and more animals and plants face extinction. This reduced biodiversity alters ecosystems and affects our own health as well as that of the planet.

To read more: <https://www.unep.org/un-biodiversity-conference-cop-15>

HOW TO CREATE A BIODIVERSE CAMPUS

By Ruth Crawford, Managing Editor, SSAFE Newsletter

Most of us are aware that native plants, particularly pollinator plants, are important components of a biodiverse ecosystem. They attract insects that support the bird population and other wildlife. But is there more to the story?

The National Wildlife Federation thinks so. Their Garden for Wildlife program assesses a garden or property to see if it is appropriate to become a Certified Wildlife Habitat®. To be awarded this designation, the site must encourage the proliferation of bees, butterflies, birds, and other animals by providing the 4 basic elements that all wildlife need:

- **Food.** Native plants can supply an abundance of food for wildlife.
- **Water.** This is essential for drinking, bathing, and in some cases breeding.
- **Cover.** Wildlife needs to shelter from predators and hunt for their own prey.
- **Places to raise the young.** Reproduction and nourishment of the young require specific conditions.

The program also encourages sustainable gardening practices, such as using rain barrels, reducing water usage, planting native plants, and removing invasive plants through natural methods.

Our greater Kendal community has been fortunate in that several campuses have been awarded the Certified Wildlife Habitat® designation.



A Certified Wildlife Habitat® sign from the National Wildlife Federation.

Kendal-Crosslands Communities qualified for the program in 2014 and proudly displays the National Wildlife Federation sign on its campus. The property is continuously maintained by Grounds Supervisor Casey Groff and his team.

Our Kendal affiliate at Collington received the designation in 2015. The site is expertly maintained by their Grounds Committee, headed by resident Charlie Clapper, a former National Park Service employee.

The most recent Kendal affiliate to receive this designation was The Admiral at the Lake in Chicago. In December, 2022, this urban high rise received certification of its lush gardens, thanks to the efforts of resident Kathryn Devaney.

For more information and details on how to apply, go to nwf.org/CertifiedWildlifeHabitat.

RESCUING AND RESTORING OUR NATIVE WOODLANDS

By Richard Lighty, Coniston at Kendal-Crosslands Communities

Coniston is surrounded by the natural beauty of forests and fields. It was built on one side of a 35-acre abandoned pasture, the edges of which were growing a mix of early succession native woody plants and exotic invasive vines, shrubs, and trees.

Initially, the adjacent field was simply mowed, with no attempts to control or suppress the exotic invasives in the young woodlands. In 2007, the woods were a jumble of young red maple, tulip-tree, ash, sycamore, and dogwood imbedded in an impenetrable tangle of Asian bittersweet, Russian olive, Japanese honeysuckle, multiflora rose, brambles, grapevine, and other invasives. The tree canopies were engulfed by vines, and most had lost their tops and large limbs. Even mature red maples over 100 feet in height had been strangled and brought down.



BEFORE: South Woods before invasive control began. Note branch distortion, brambles, invasive species.

In the winter of 2008, I decided to attack the problem one hour at a time—initially by killing the vines that were destroying the canopy. This was easier than expected, since Asian bittersweet and grape vines, cut

at the right points, resprouted only weakly and, in the absence of shrubs and low branches, were unable to climb back to the canopy. As the tree canopy thickened, the diminished light suppressed any regrowth of these sun-loving invasives, and cutting, pulling, or sparingly applying an herbicide easily controlled any weak sprouting from the roots.

Early on, I decided to keep a record of the time spent on various tasks in each of the wooded areas at Coniston. The East Woods, where I began, was 5.8 acres in size, and over 4 years, from 2008 to 2012, we freed the canopy and the understory of all significant exotics, requiring an expenditure of just 64 man-hours (16 man-hours per year, or an average of 2.8 man-hours per acre/year). To similarly clean up the next woodland we tackled—the 4.5-acre South Woods—took 10 years and required 174.5 man-hours (17.5 hours per year or an average of 3.9 man-hours per acre/year). The difference between these two woodlands was due, in part, to a slight difference in their ages, but was mainly a result of the earlier use of mowing to manage succession in the South Woods.

As important as freeing the canopy of vines was, it was still only a first step. The full-sun edges of hedge-rows and woodlands in the mid-Atlantic region are typically filled with thorny shrubs disseminated by birds: Russian olive, multiflora rose, wineberry, and blackberry. They are also home to the same vines that

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Woodlands (cont'd)

plague woodland canopies. If not controlled, the vines will quickly clamber over the shrubs, reach into the lower branches of adjacent woodland trees, and ultimately re-infest the canopy.

By 2017, more residents had joined the battle to attack the edges, with debris removal by our Grounds department. The stumps were treated with an herbicide to kill the roots. To assure that the progress made would not be lost, we asked that the meadow edges be mowed annually with the larger meadow, and that they mow right to the base of woodland trees. We pruned the overhanging branches of those edge trees to permit the mower to pass through safely. The branches we left will continue to suppress any exotic shrub seedlings.

The final necessity in rescuing a degraded woodland is routine monitoring and control of invasive seedlings as they occur. This is an endless process, but it becomes progressively easier and less time-consuming so long as none reach maturity, flower, and fruit. The soil seed bank of invasives is eventually depleted. The effectiveness of monitoring and control has best been shown in three small woodlands adjacent to the residential area at Coniston, each less than an acre in size. In each of these, the woody invasives were eliminated within three or four years. With assiduous routine monitoring, the exotic herbaceous weeds, mostly winter germinating annuals and biennials, were killed before flowering. Now, 15 years after



AFTER: South Woods 5 years after canopy vine removal. Note tubes protecting native tree plantings.

control began, these woodlands are essentially free of all exotic invasives.

Full restoration of the woodlands we've rescued will be a long process, but it has already begun with the planting of more than 400 native, long-lived, hard-wooded forest trees: oaks, maples, beeches, birches, hornbeams, hop-hornbeams, and elms. We have not only improved the diversity in our young forests, but have also provided a seed source for species that were historically a part of our regional, native old-growth woodlands. However, we must still begin the process of introducing and protecting sub-canopy shrubs and trees.

Those of us who have been part of this process will not see the mature results—that will take a century or more. But we are confident that our stewardship has made an enormous difference and optimistic that this will be continued in the future.

For more information, email the author at taraxicum@icloud.com.

ASKING THE RIGHT QUESTIONS ABOUT RECYCLING AT OBERLIN

By Dorothy Luciano, Kendal at Oberlin



Plastic bales waiting for a market.

We felt proud and self-satisfied, recycling our #1–#7 plastics at Kendal at Oberlin, but then the sad news came. In October 2022, Greenpeace published “Circular Claims Fall Flat Again: 2022 Update,” which said that very few plastics are really being recycled—only a few #1s and #2s.

Several reasons were given:

- They are difficult to collect.
- Because the 7 plastic numbers include thousands of chemically different plastics, they are almost impossible to sort.
- They are environmentally harmful to reprocess.
- They can be made of, or contaminated by, toxic materials.
- The recycling process is usually not economical.

The Appendix to the Greenpeace report indicated that our local Material Recovery Facility (“recycler”) accepts “only plastic bottles, jugs, and jars.” Period. The recycling numbers aren’t mentioned.

According to Kendal at Oberlin’s contract, our recycler picks up all #1–#7 plastics, but it was now clear that most were either going into the landfill or being collected in useless warehoused bales. Kendal’s

Recycling Committee chose to face facts and try to change our recycling patterns.

First, we invited a representative from our local recycler to give a presentation to the community, bringing samples of what could be recycled and what was trash. She explained the differences as she clearly deposited each object in one of two receptacles— one plainly marked “recycle,” the other marked “trash.” We also invited residents to bring items they had questions about and to ask questions at the end of the presentation.

We followed this up several weeks later with a display in our main hallway. One end of a table was marked “trash” and contained a very large pile of yogurt and cottage cheese containers, broth boxes, food pouches, clam shells, plastic bowls and plates, lids, food trays, plastic cups and glasses, straws, etc. The other end, labeled “recyclable,” had a comparatively small pile of water and soda bottles, milk and juice jugs, and detergent containers.

Now, any items that are still inappropriately being put in a recycle bin labeled “plastics” are hung on the wall above the bin and clearly labeled “trash.”

Many of us miss the good feeling of doing our part for the environment, and it’s been a challenge to get some folks to understand the change. We did relax our goal of 100% success, deciding that if we hit 80%, that’s okay. “Doing our part” now means educating the community and working with our recycler to deposit only truly recyclable plastics.

VIDEO REVIEW

By Larry Daloz, Kendal at Hanover

"Nature's Best Hope" A National Wildlife Foundation Presentation

By Dr. Douglas Tallamy

In our most recent Climate Café discussion group, we treated ourselves to a video presentation from one of the country's most delightful and entertaining naturalists, Doug Tallamy. His name echoes through the landscape committees of our campuses, and we all fell in love with him. Perhaps most appealing is his rich understanding of how the interdependence of natural systems can lead us to some very practical actions.

Here's one example: many of us have been dismayed by the shocking decline in birds and birdsong that we have noticed in recent years. Bird population in the US has fallen by three billion over the past fifty years, Tallamy tells us. What can we do about it? Well, one of the most nutritious and accessible foods for large numbers of birds is caterpillars, he says, and it turns out that caterpillars love oak leaves. So, plant oak trees. Who knew?

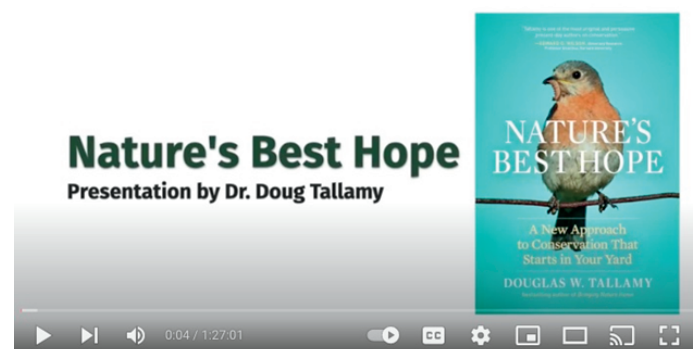
There are lots of other things we can do as well, of course. We can shrink our lawns, which turn out to be largely devoid of food for birds. We can re-wild parts of our yards with native plants like goldenrod that provide food for other tasty insects, or with native berry-producing plants like Virginia creeper or highbush cranberry. He's full of practical ideas.



The caterpillar stage of a Monarch butterfly.

But beneath his charming delivery and numberless ideas lies his deeper message to us all: we can no longer continue to take the natural world for granted, to treat it as “other” than ourselves, to “carve it into tiny remnants,” and to exploit it as though we don't also depend on it. “When we try to pick out anything by itself, we find it hitched to everything else in the Universe,” said John Muir. And, yes, that would include ourselves.

A quick Google search will bring up a number of Tallamy's talks (we watched at [youtube.com/watch?v=WY4aV5hqkxY](https://www.youtube.com/watch?v=WY4aV5hqkxY)). We'll bet that once you've seen one, you'll find yourself down the rabbit hole after others. That done, you can pick up a copy of his best-selling book, *Nature's Best Hope*, and you're on your way.



Wrapping Up

Don't miss our next Climate Cafe!

We will discuss selections from the book:
Silent Spring by Rachel Carson

“Rarely does a single book alter the course of history, but Rachel Carson’s *Silent Spring* did exactly that,” reads the quote on the book’s cover.



Many of our readers may have read the book in 1962 and witnessed the resulting launch of the environmental movement. Let's talk about the implications of this landmark book on the world we live in today.

The next Climate Cafe discussions will take place on:

Wednesday, April 12th, at 11 a.m. Eastern
Wednesday, May 10th, at 11 a.m. Eastern

Learn more and register at SSAFE.org/cafe or email info@ssafe.org.



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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