



WEST CHESTER GREEN TEAM NEWS

July 2023

Mission: The West Chester Green Team is a civic organization in West Chester, PA, that works to educate the local public and to establish and nourish green initiatives in the community in harmony with nature and each other, promoting the health of all living things and of planet Earth.

Inside:

"Meadowitos," Dark Skies, Legendary Lenapes, Alley beautification, "Green" filters for cars, Mosquitos. . . and more!



WCGT Calendar of Upcoming Events

When – What – Where.



Remaining Legendary Lenape Sessions:

July 8: Eagle Heart Session: 10am-12pm, Birmingham Meeting House, 1245 Birmingham Rd, West Chester, PA

July 15: Fox Mill/Living with the Land Session: 10am-12pm, Bondsville Mill Park, 1647 Bondsville Rd, Downingtown PA

July 22: Moose Lake Session: 10am-12pm, Westtown Lake at Westtown School.

July 29: Beaver Creek Session: 10am-12pm, Bondsville Mill Park, 1647 Bondsville Rd, Downingtown PA

July 18: 7 PM, Spruce Alley project meeting, Ironworks Church, corner of S. New and Union Sts, West Chester, See page 7 for details..

July 25: 7PM, WCGT Board meeting, 409 W. Union St., West Chester

For details on these and other July (and later) events, see listings beginning on page 3.

Related groups and committees:

4th Monday of every month: East Bradford Environmental Advisory Council (EAC), 7 – 8:30pm, East Bradford Township Bldg, 676 Copeland School Rd.

4th Monday of every month: East Goshen Sustainability Advisory Committee, 7 – 8:30pm, East Goshen Township Bldg, 1580 Paoli Pike

4th Tuesday of every month: West Goshen Sustainability Advisory Committee, 6 – 8 pm, West Goshen Township Bldg., 1025 Paoli Pike

4th Tuesday of every month: Westtown Environmental Advisory Council, 7 – 8:30pm, Westtown Township Bldg., 1039 Wilmington Pike (Rt. 202)

4th Thursday of every month: West Chester Sustainability Advisory Committee, 6:30 – 8 pm, Room 240, Borough Hall, E. Gay St.

Be sure to visit our Web site at <https://wcgreenteam.com/> and our Facebook page at <https://www.facebook.com/WCGTeam/> (all are welcome to post environment- and sustainability-related items there). If you wish to support our work, please donate here: <https://wcgreenteam.com/contact-2/>

NOTE: Deadline for the August issue is July 31! We welcome contributions and suggestions from our readers for possible inclusion in a future issue. E-mail your ideas to Dianne Walsh at LDwalsh318@gmail.com.

This and That

More Coming Attractions:

The Legendary Lenape: Our summer program features these sessions. Sign up at <https://wcgreenteam.com/2023/05/15/legendary-lenape-summer-program-june-august-2023/>. Please note that there is a registration fee per session of \$10 per person or \$15 for a family of 4. Canoe sessions have an additional fee of \$60 per canoe.

Saturday, July 8: Eagle Heart Session: 10am-12pm, Birmingham Meeting House, 1245 Birmingham Rd, West Chester, PA 19382. Learn about the Lenape's lifestyle through crafts and games. Come hear Lenape stories and enjoy a traditional Native American snack: popcorn!

Saturday, July 15: Fox Mill/Living with the Land Session: 10am-12pm, Bondsville Mill Park, 1647 Bondsville Rd, Downingtown PA 19335. Carrie Hawk, Environmental Educator with Stroud Water Research Center, will lead this session, teaching participants about native animals and plants. Come see how we have adapted to our world. Discover how we can adapt to live with nature, not against it.



Saturday, July 22: Moose Lake Session: 10am-12pm, Westtown Lake. Back on the water! Participants will canoe around the lake, taking in the natural landscape of the Westtown School, founded as a coeducational Quaker boarding school in 1799. There will also be a scavenger hunt and the opportunity to learn some words in the Lenape language. Meet at the lake.

Saturday, July 29: Beaver Creek Session: 10am-12pm, Bondsville Mill Park, 1647 Bondsville Rd, Downingtown PA 19335. Faith Zerbe, from Maya van Rossum's Delaware Riverkeeper organization, will conduct a stream study in Beaver Creek at Bondsville Mill Park. Come enjoy a lesson in science at this historic mill and find all the interesting creatures that call streams their home!

Sunday, July 30: Wawaset Creek Session:, 1 PM, Northbrook Canoe Company, 1810 Beagle Rd, West Chester, PA 19382. Canoe along Wawaset Creek, one of several Lenape names for the Brandywine. We will launch from Northbrook Canoe Company at 1 PM. **No children under the age of 2 permitted.** Canoes are limited to 20. Reserve yours today. All welcome. Cost per canoe is \$25 instead of the usual \$65 thanks to generous donors to the WCGT.

Sunday, August 6, Drumming Bear Session: 4pm-6pm, Melton Center, 501 E Miner St, West Chester, PA 19382. Learn how the Lenape grew their “three sisters” crops. Also learn the basics of drumming and of cooking food, clambake-style. Featured will be local corn on the cob.

Sunday August 13, Feast of the Lenape: 4pm-6pm, Melton Center, 501 E Miner St, West Chester, PA 19382. Get together one last time to celebrate the end of our sessions with a banquet of traditional Native American dishes (including dessert!). The recipes were pulled from the Mitsitam cookbook produced by the Smithsonian's American Indian Museum and will be prepared by local chefs. Desserts will be sweetened with maple syrup.

You can read more at <https://www.dailylocal.com/2023/05/16/canoeing-popcorn-and-mother-earth-celebrating-the-legacy-of-the-lenape/>

August 6 at 4 pm: Gardening at the Melton Center

August 24 at 6:30 pm Dark Skies. Welcome to WCU Planetarium-- with WCU Astronomy Prof Marc Gagne', Rep Chris Pielli and Senator Carolyn Comitta. who brought this issue to the Green Team and inspired the creation of a Dark Skies Committee. Special thanks to Prof Marc Gagne' who organized this event. This is a free event. All welcome. More details on Facebook, Instagram and on the GT website.

August 26 at 5 pm at CCHC: Bringing Nature Home in Chester County with keynote speaker Doug Tallamy with updates on WC Green Team activities in the past year. Celebratory dinner by Mae's, cake by the Master Baker with gelato by D'Ascenzo's. Come celebrate with the Green Team and allied environmental organizations from across the area.

As always, see updates and other events in our website calendar at the bottom of our Web site homepage at <https://wcgreenteam.com>

Dark Skies Meeting Report

By Tim Lawlor

The committee met via Zoom on June 13th to discuss current activities and future plans. Following a planning lunch with our Dark Skies intern, Co-chair Suzanne Webster suggested we drop into Chris Pielli's West Chester Office, where we were warmly greeted by Julie Mesaros, District Office Director. Julie discussed dark sky issues with us.

The committee further discussed and planned how to proceed with a committee presentation at an (at that time) upcoming meeting at 7:30 pm on June 15th with the Malvern Planning Commission. Barry Johnson, Marc Gagne and I attended the meeting and Barry presented a broad topic presentation about using proper lighting (presentation available on request). The meeting lasted well over an hour and the commission had numerous productive questions about light pollution and ordinances.

Also in May, we sent a liaison from our committee (Barry Johnson) to West Bradford Day, an event with a focus on the environment, and of course we had a great turnout at Porchfest, handled by our immediate past chair Marc Gagné and our Dark Skies intern, Marissa Mower. Marissa has also increased our social media footprint, and we now have an active Instagram account which you can follow at WCGTdarkSkies.

Finally, we discussed some continuing ideas to keep in mind such as creating letter templates and more PowerPoints.

What is a Meadowito?

Meadowitos is an environmental/community project of the Kennett Library that seeks to address the problem of habitat fragmentation. Fragmentation impacts the ability for a wide variety of wildlife, particularly birds and insects, to thrive. Fragmentation, in both social and natural realms, has profound and negative effects at many levels. When we create pollinator pathways we enable both humans and wildlife to restore connection. By planting areas with resilient native plant species, we can establish “micro-meadows”: Meadowitos.

Read more about the program here:

<https://kennettlibrary.org/meadowitos/#:~:text=Meadowitos%20is%20an%20environmental%2Fcommunity,birds%20and%20insects%2C%20to%20thrive.>

It's Plastic-Free July!

This July, millions of people around the world are taking their own steps by choosing to refuse using single-use plastic. Last year, participants avoided 2.6 million tons of waste!

It doesn't matter what choice you make: switching to reusable cups,

Avoiding plastic packaging, or inviting friends and family to take part, together our small steps make a big difference. What's YOUR step? Share it online and tag @plasticfreeJuly #SmallStepsBigDifference.

Also see

<https://www.plasticfreejuly.org/resources> for ideas.



Our Legendary Lenape Program Is Underway!

The West Chester Green Team launched its summer family education series on Saturday, June 24.

A group of almost 40 people of all ages gathered at West Chester Friends Meeting House to hear Chris Applegate from the Museum of Indian Culture in Allentown. Applegate spoke about the daily lives of the Lenape tribe 500 years ago, before the arrival of colonists. She displayed dozens of items including a pair of elk skin moccasins. Pennsylvania, she told her audience, is the home of a large elk herd now, after total extinction and reintroduction in the early 20th century. Many Elk are living, appropriately, in Elk County. Even though the elk are back, in so many other ways, there have been vast changes. Now the Lenape live as others do, with cell phones, cars, and jobs.



Chris Applegate, in Lenape-style dress, speaks to participants



Chris Applegate's display illustrating Lenape life in about 1500. (Photograph by Renee Perna.)

Applegate talked about the importance of music to the tribe and showed a turtle shell rattle and shakers made from deer hoofs. She demonstrated a bow and arrows, as well as a spear. A Lenape style cradleboard with a life size doll in it, carried by a strap on the forehead, not by shoulder straps as are modern baby packs, was also displayed. Applegate described the grinding of corn and the growing of "Three Sisters" vegetables, with corn in the center and beans and squash by its side. Planting in this way insured the health of the crops and, when eaten together, "the three sisters" provided healthy, balanced nutrition.

"Wanishi" means thank you in the Lenape language and generosity is the core value of the culture. In her concluding story, Applegate told the tale of how the bear lost his tail. The reason: he was greedy and would not share fish he had caught with a hungry raccoon.

Green Team volunteers Molly Hanford and Renee Perna worked with children making a native American craft called journey sticks. The children chose feathers and pinecones, bright colored



Blythe and Charlotte Wessman making journey sticks with Renee Perna and Molly Hanford. (Photograph by Jim Hudgings.)

yarn and beads to create their own representations. Native Americans made the sticks to tell stories of their travels.


This event was the first in a series of eight programs devoted to the Lenape tribe and its heritage. Upcoming programs in the "Legendary Lenape" series will involve canoeing on the




Kate Long working with Molly Hanford on her journey stick. (Photograph by Jon Long.)



Brandywine on July 30, a picnic and scavenger hunt at Westtown Lake, stream study at Bondsville Mill Park and an exploration of native American cooking at the Melton Center. For more information, see <https://wcgreenteam.com/2023/05/15/legendary-lenape-summer-program-june-august-2023/>.

Spruce Alley Beautification Project Meeting



WEST CHESTER GREEN TEAM'S ALLEY BEAUTIFICATION: A REPORT TO THE COMMUNITY








Urban designer and alley expert Thomas Dougherty and landscape architect Chris Pugliese will talk about plans drafted by Christiane Torres for the 400 block of Spruce Alley. Proper plantings attract birds, nourish pollinating insects, counteract heat, absorb run-off, and please passersby. The West Chester Green Team's alley beautification project seeks more native trees, bushes, vines and flowers, and upgrading the appearance of garages, fences, and driveways. A question and answer session will follow the lecture.

**TUESDAY,
JULY 18
7PM**

**IRON WORKS CHURCH, 312
W UNION ST., WEST
CHESTER**

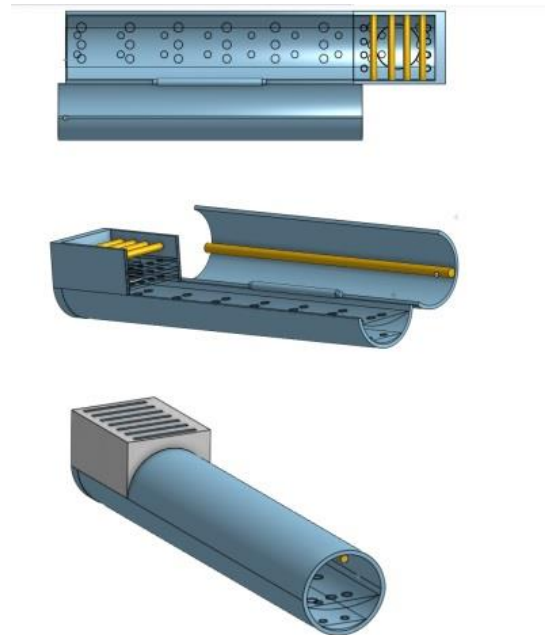
ALL ARE WELCOME!

Go Green Filter for Cars

By Jack Reichert

The automobile industry is the most extensive contributor of greenhouse gas emissions in the world, accounting for over a quarter of all emissions. To mitigate this problem, electric cars were invented; however, they are not affordable—costing, on average, \$7000 more than gas-powered vehicles. The Go Green filter takes a unique approach by filtering carbon dioxide through a penta algal filter. Instead of reinventing the wheel and trying to make people spend thousands of dollars on an electric car, we can clamp a filter with the most efficient photosynthesizers on earth—algae—to filter carbon dioxide into harmless oxygen. In fact, algae filters have already been implemented by former MIT professor Isaac Berzin. By placing algae in MIT's cogeneration plant, Berzin discovered that within three months the algae no longer relied on air; rather, they relied on flue gases. In other words, algae can adapt to any environment they are subjected to. However, professor Berzin only used algae as a filtration system in the cogeneration plant; algae has never been used to filter carbon dioxide in cars.



Because of this uncanny adaptation principle of algae, we can place algae in a filter in the exhaust pipes of automobiles so they can use the carbon to kickstart photosynthesis. Through rigorous testing with an NDIR Infrared Carbon Dioxide Sensor, the Go Green filter has the capacity to reduce carbon emissions in automobiles by 74.25% but can be as high as 79.62%. To achieve this drastic reduction, we strategically implemented two horizontal algae plates and three vertical algae plates. This specific orientation maximizes the amount of carbon dioxide interacted with algae, thus allowing to always be converting carbon dioxide into oxygen— a harmless byproduct. The filter not only implements the most efficient photosynthesizers on earth but also is engineered specifically to maximize the interaction between algae and carbon dioxide.

How the Filter Works: Filter Contains: *Tetraselmis suecica* and *Nannochloropsis oculata* (the two species of algae), water, and pure light allowing algae to convert CO₂ into O₂, which would reduce GHG emissions.

1. As CO₂ discharges out of the exhaust pipe, the cylinder portion of the filter will capture a share of the CO₂ and perform photosynthesis to make O₂.
2. Inside the glass chambers will be a layer of proprietary aluminum wire mesh (as it has a high specific heat) holding the algae in place and water to provide the algae with fundamental nutrients.
3. On the top of the cylinder and box portion will be strips of white light, which act as the light source for the algae's photosynthesis. The remaining CO₂ will have to pass through three more algal plates, which will increase the surface area CO₂ interacting with algae.
4. After photosynthesis is performed, the O₂ gets released out of the exhaust pipe into the atmosphere. CO₂ will interact with algae at five distinct plates, which are designed to increase the surface area of carbon dioxide exposed to algae.

Go Green Filters, con't.

5. At each plate, algae will perform photosynthesis and make O₂ – a safe byproduct– and glucose which will sustain the algae. The glucose will allow the algae to rapidly reproduce, up to double in mass, and keep performing at optimal rates.

6. However, the consumer will need to add water every couple of months to support the algae biome. The cylinder portion of the filter will be clamped into the exhaust pipes and the box portion outside; the clamp will allow for the filter to be adjusted to fit nearly all vehicles.

7. The product is safe for the car because everything that the car needs to excrete is being released, yet it's converted into oxygen instead of harmful carbon dioxide.

*150 models are currently in use Today!

WCGT Interns and Community Gardens Report

1) Interns

We have new interns! Elizabeth Cunningham, a 2023 Elizabethtown grad, is working for us from May 15 to August 15. She has proven, as we had hoped, to be enthusiastic and conscientious at helping administer the Legendary Lenape program by fielding and replying to inquiries and emails and by maintaining the list of all participants. She has also written the first of 5+ articles and is well along on two of the others. She also gave some last-minute help to Porchfest and her write-up "Sounds of life: West Chester celebrates 2nd annual Porchfest" was published in the May 30 [Daily Local News](#). We meet with her once a week (except last week, when she was in an intensive MA in Creative Writing program at Wilkes U.).



As of this week, Olamide Olaniyi, a rising senior in WCU's Honors College, will be joining in our meetings; thanks to the kindness of WCU's Center for Community Solutions, she will be working with us for up to 10 hours a week for about 7 weeks. As a very high-achieving Bio and Chem double major with an interest in sustainability, Ola will be helping us update our knowledge and published information about pesticides and herbicides, through both Don't Spray Me! and the Green Team.

Related topic: we have four high school students from WCASD, Unionville HS and Wilmington Friends School—Ryan Horenkamp, Mateo Niiler, Jack Reichert and Tyler Schmale—volunteering this summer on Legendary Lenape and other assignments, managed by Margaret and Jim.

2) Community gardens

Lindsey Pastor, now in her 3rd summer of gardening at the Barclay, is kindly coordinating our seven gardeners there. She has succeeded in getting them all moving along, we hope to the satisfaction of our contact at Barclay, which hosted one of the three Ecological

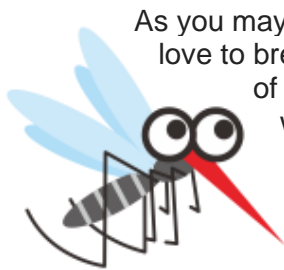
Interns and Gardens, con't.

Landscaping Tours organized by Paula and local Quaker organizations on June 17.

In the three more informal raised beds at the Lockards', after one fairly recent substitution, we have gardeners at work also.

Related topic: West Chester Borough has now inaugurated a system for residents to help maintain rain gardens, and at least for the six on S. Everhart St., that is working. At some point the Borough should be providing plants for any still open patches.

Mosquito Season, Hypersensitivity and Beehives



As you may have noticed, mosquitoes are multiplying again. In urban areas, they love to breed in favorable spots that we have created: bird baths, forgotten bowls of water left out for pets, plates under outdoor (or indoor!) plants, unused wading pools, ill-draining eaves, any other stagnant water.

It is our duty to empty out all stagnant water! Every 3-5 days should be in plenty of time to stop eggs from turning into adults. If the water can't be emptied, use a larvicide ("mosquito dunks," available at hardware stores and through some municipalities).

If you have a chemical sensitivity, please register with the state at https://www.agriculture.pa.gov/Plants_Land_Water/PlantIndustry/health-safety/pesticide-programs/PesticideCART/Documents/Pesticide%20Hypersensitivity%20Application%20Form.pdf/.

You will need to print out the form and have your doctor endorse your request. Then the County or any other sprayer of chemicals within 500' of your house and/or workplace will need to give you advance notice of any spraying. That gives you time to absent yourself, close all windows, turn off outside air intakes in air conditioners, etc.

And: all bees are hypersensitive! In fact, exposure to chemical sprays kills them and most other insects (mosquitoes are more elusive and resistant than others). If you manage a bee hive, even a small one, you should register it with the state

at <https://www.pastatebeekeepers.org/resources/Documents/registration.pdf/>.



Then your bees will get better protection than humans, because sprayers are not allowed to spray within 500' of your hive.