

Catoctin News

Newsletter of the Catoctin Group Serving Carroll, Frederick and Washington counties

Volume 1, Issue 4 Winter 2014

Frederick County Scraps Plans for Waste-to-Energy Incinerator

by Dan Andrews

"The arc of the moral universe is long, but it bends towards justice."

Martin Luther King Jr.

After an 8-10 year struggle, the incredibly expensive 1,500 tons-per-day Frederick and Carroll County regional waste incinerator is finally dead. On November 20th, 2014, the Frederick County Board of Commissioners voted 3 to 2 to terminate the project as well as five approved MDE permits.

Over the years, local residents in both counties attended many meetings and protested the project. Two grassroots groups, No-Incinerator-Alliance and Waste Not!Carroll, worked with established environmental organizations — Institute for Local Self Reliance, Chesapeake Climate Action Network, Clean Water Action, Community-Research, Energy Justice, Environmental Integrity Project and the Sierra Club — to help stop this dreadful project.

In addition to the incinerator's many financial, logistical, and environmental problems, it would have turned Buckeystown into trash-central for many decades.

Carroll County exited the dual county partnership last April, on Earth Day of 2014 — perhaps a wonderful coincidence — after deciding that troubling financial stipulations weren't in the County's favor. With no replacement partner and upon further review of the finances, Frederick County decided it was no longer in its best interest as well.

Frederick residents won't have to meet monthly payments for a huge trash burner, can now preserve waste resources for better use, can breathe cleaner air and preserve the view-shed of the proposed site-adjacent to historic Monocacy Battlefield. And they can begin to transition their county to zero waste methodologies that include: waste reduction and reuse, maximizing curbside recycling collection, expanding business recycling, exploring Save/Pay-As-You-Throw (SAYT/PAYT) possibilities, building Materials Recovery Facilities and Construction and Demolition Recycling Facilities, promoting institutional compost collection, and building windrow composting facilities.

With courage, determination and a willingness to change, our future can be much brighter, and financially sustainable, without a regional waste incinerator. But, we'll still need a revolution in caring by our citizens, businesses and governments in order to create solutions to our waste issues. ■

Trans Pacific Partnership Informational Conference Call

Mark your calendars for January 5, 7PM for an informational conference call about the Trans Pacific Partnership (TPP), a huge trade deal that has been nicknamed "NAFTA on Steroids" - because it contains all the bad stuff from NAFTA and more. Betsy Johnson (Political Chair, MD Chapter) and Stan Boyd (MD Chapter Exec Committee Member) will brief you on the TPP and the Sierra Club action plan for defeating President Obama's attempts to "fast-track" it (limited debate, up or down vote, no amendments) and answer any questions you have.

Details:

Date: January 5, 2015

Time: 7 PM

Register <u>here</u> and the call information will be sent to you.

Agenda:

What is the TPP and why should environmentalists be concerned about it?

What is fast-track and why are we against it? What are we proposing to replace fast-track? What is our action plan for achieving these objectives? Questions and Comments

A national organizer will be working in the Catoctin region for the purpose of getting Congressional support for a new form of trade authority instead of fast-track. In MD the priority targets will be Chris Van Hollen and John Delaney. There are already 151 Representatives that have signed onto a letter to President Obama asking him not to fast-track the TPP. All of MD's other Democrats (except Steny Hoyer) have signed onto that letter. We would like for Van Hollen and Delaney as well to pledge to oppose all attempts to fast-track the TPP. Since you are in a district we are targeting for this effort, we would like for you to be informed about this issue.

I hope you can join us.

Beyond the Lawn: Landscaping with Nature

Date: Saturday, January 17, 2015

Time: 8:00 AM to 4:30 PM

Leader: Carolyn Puckett

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Join the Carroll County Extension Office and the Carroll County Forest Conservancy District Board on January 17, 2015, from 8:00 to 4:30, for a workshop on creating your ideal landscape. Do you wish to create a healthy, low-maintenance landscape but you don't know where to start? This course will teach you how to make your property water-wise, wildlife friendly, and both beautiful and functional.

For more information or to register for this workshop see:

https://extension.umd.edu/news/events/sat-2015-01-17-0800-beyond-lawn-landscaping-nature

American Conservation Film Festival

BEST of FEST – 7:00 PM, February 28, 2015 at the Weinberg Center for the Arts, 20 West Patrick Street, Frederick, MD 21701.

One or two of the best films from the 2014 Festival will be shown- details coming soon! See http://conservationfilm.org/special-events/

The **Catoctin Group** will have a table at this event.

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Energy-Wise Landscaping

by Carolyn Puckett Master Gardener and Master Naturalist

As Sierra Club members, you are already aware of our need to switch from fossil fuels to a more environmentally-safe form of energy. I bet you also already take measures to conserve your use of energy, but have you ever given thought to using plants to help conserve energy?

Before the advent of air conditioning and central heating, people used plants to keep their house cooler in the summer and warmer in winter. Those same techniques can work for you today to lower your energy bills—cutting air conditioning bills 15 to 50 percent and heating bills 25 to 40 percent according to the Environmental Protection Agency!

Keeping your house cool in summer

Air conditioning works to remove the heat from your house after the heat is already accumulated. Air conditioners consume more electricity than any other appliance. In fact, central air conditioners can account for 14.9 percent of total energy consumption.

It is much more dollar-wise to take steps to prevent heat from entering your house in the first place. You can use landscaping techniques to potentially reduce interior temperatures 20 to 45 degrees.

Use trees to shade roof, walls, and windows. Shading your windows with outdoor plants can be twice as effective as curtains or shades. But where do you plant these trees?

In the early morning and late afternoon, shadows are long and a tree can have a cooling effect even when the tree is planted fairly far from the east or west side of the building. By midmorning and midafternoon, shadows are shorter and trees would need to be closer to the house on the southeast or southwest. At midday, small trees or large shrubs very near a house's south wall provide the best cooling. Overhangs or porches can also shade the south side of the house, and large trees with branches hanging over the roof will help keep the inside of your house cooler.

In addition to shade, transpiration from plants, especially trees, cools air above, below, and all around them. Due to its tremendous leaf surface, a single mature tree with a 30-foot crown transpires approximately 40 gallons of water per day, reducing temperature 2 to 9 degrees. For maximum cooling of the entire landscape, plant trees and shrubs on as much property as possible.

Plants can help steer cooling breezes to your house. In the temperate U.S., direct breezes from the southwest toward your house in summer by planting in rows parallel to that direction and angled slightly inward toward the house, creating a kind of funnel effect. Trim up the lower branches of trees that stand between the breeze and the house.

Plants also help moderate heat by keeping the soil cool. The ground a few feet below surface is consistently cool, but the surface can get warm from the sun's heat. Use plants to shade the soil to keep the surface from absorbing heat during the day that will radiate into air at night. Again this is most important along the south side of the house. To shade the ground, keep tree branches low and place trees where they will shade your driveway pavement. Minimize hard surfaces that absorb heat near to the house.

Warming the house in winter

In the winter, you want your house to absorb the heat from the sun. To avoid shading the south side of your house, space any evergreens on the southwest or southeast of the house a distance of at least 3 1/2 times the tree's mature height.

Windbreaks can reduce wind velocity as much as 50 percent, consequently, preventing cold northwest winds from stealing the heat from your house thus reducing your winter fuel consumption by 10 to 24 percent. The most effective area for a windbreak is on the north or northwest sides of your home at a distance from three to six times the height of the trees. There may be some slight benefit from a windbreak at a distance as much

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as 20 times the height of the trees. A mixture of evergreens and deciduous plants is best, as porous windbreaks reduce wind turbulence. To provide foliage all the way to the ground, include shrubs. A diverse set of trees and shrubs will have the added benefit of providing winter habitat for birds. And several rows of trees and shrubs are more effective than a single row. Remember to leave space between trees for growth.

A windbreak will provide the best protection when it is oriented across the direction of the wind rather than parallel to it, so align it generally east to west in a slightly convex shape. The windbreak should be longer than the structure it is to protect by at least 10 to 20 feet (and even 50 feet if space allows) in each direction to diminish the effect of turbulent winds.

Fences and structures are also good windbreaks. Solid structures will slow the wind more, but they also create more turbulence immediately downwind and cause snow to accumulate on the windward side. Fences that are 25 to 50 percent permeable will minimize snow accumulation. Any structure or fence that receives the full brunt of winter winds must be built to withstand a significant amount of wind pressure.

For a smaller property, plant the wind buffer near the house. Plant evergreen shrubs so that outer tips of branches are at least 1 to 3 feet from the wall. Evergreen vines can also help keep the heat in your house.

Other ways to reduce energy use

Another landscaping trick to reduce fossil fuel use is to have less lawn. Mowers use 580 million gallons of gasoline each year and create as much as 55 tons of VOCs (volatile organic compounds) annually in the Baltimore-Washington area.

Homeowners apply ten times as much fertilizer to lawns as our farmers use each year. Americans apply 67 million pounds of pesticides to their lawns yearly, poisoning the insects that provide food for birds. In addition, the manufacture of fertilizers, pesticides, herbicides, and fungicides consumes fossil fuels. For example, synthetic fertilizers are produced by blending hydrogen and nitrogen at temperatures as high as 1200 degrees, requiring lots of energy to produce. Furthermore, the production and transporting of lawn mowers, tractors, trimmers, edgers, sprayers, tillers, aerators, sod lifters, and leaf blowers take energy.

If you convert some of your property to naturalized woodland, you can replace the lawn with an assortment of shrubs, perennials, and groundcovers. The fallen leaves can act as a natural mulch around other plants, can be composted or can remain on the lawn as fertilizer.

Conclusion

The proper placement of plants to provide shade in the summer and a windbreak in the winter can help you reduce your energy costs substantially. Replacing some of your lawn with woodlands, shrubs, or perennials will keep the ground cooler and will also reduce water runoff, making for a water-wise as well as energy-wise landscape. In addition, you will be providing much-needed habitat for our native birds, bees, and butterflies.

For more information see the following:

Reed, Sue. *Energy-Wise Landscape Design: A New Approach for your Home and Garden*. 2010. New Society Publishers.

Landscape Plantings for Energy Savings. University of Missouri Extension. Available at http://extension.missouri.edu/p/G6910

Beneficial Landscaping: Environmentally-friendly Landscaping. Available at http://www.epa.gov/greenkit/landscap.htm.

Sustainable Landscaping. Available at http://www.epa.gov/greenacres/smithsonian.pdf

Energy Saver 101: Everything You Need to Know About Landscaping. Available at http://energy.gov/articles/energy-saver-101-infographic-landscaping

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Maryland Backyard Buffer Program

One of the best ways to help water quality (both locally and for the Chesapeake Bay), support native critters, and offset climate change is to plant trees. Maryland's Backyard Buffer program provides native trees with low-cost shelters to a limited number of qualified residents.

Carroll County applications are due by March 13, 2015 — Information is available at https://extension.umd.edu/news/events/sat-2015-04-11-0000-backyard-buffers-low-cost-trees.

Contact information for other counties may be found at www.dnr.maryland.gov/forests/pdfs/byb-program.pdf.

Officers/Committee Chairs

Chairman & Energy
Dan Andrews

Treasurer Al McKegg

Secretary & Outreach/Social Media Amy Andrews

> Political Laurie Wilmott

Conservation Lew Sherman Anthony Iacovelli

Invasive Plant Removal Stewardship Carolyn Puckett

> Outings Harry George Anthony Iacovelli

Membership & Newsletter Teresa Baker

For further information visit http://maryland.sierraclub.org/groups/catoctin-group

The next Executive Committee Meeting is scheduled for Saturday, Jan. 3 from 10:00 a.m. to 12:15 p.m. at the Urbana Public Library, 9020 Amelung Street, Frederick, MD, 21704 in Frederick County.

Executive Committee Meetings are held the first Saturday of every month. Location varies.

All are welcome, members and non-members alike.

Contact Dan Andrews at dooze@qis.net for exact date, times and location.

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