



Catoctin News

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

Volume 3, Issue 1

Spring 2016

Sierra Club Catoctin Group 2016 Spring Outings

Tree Planting with Stream-Link Education

Where: Walkersville, MD

When: Saturday, April 9 (10am-12pm) (April 16 Rain Date)

For more information: <http://www.streamlinkededucation.org/plantings/>

Frederick Watershed Trash Pick Up organized by the Common Market

When: Saturday, April 16 (9am-1pm)

For more information and directions to site: <https://www.commonmarket.coop/events/watershed-trash-pick-up-2/>

Catoctin Mountain Park hike to commemorate the National Park Service Centennial with a moderate to difficult 8.5 mile hike

When: Sunday, April 17 (8am-1pm)

For more information: <http://www.sierraclub.org/maryland/calendar>

Tree Planting with Stream-Link Education

Where: Frederick City

When: Saturday, May 14

For updates regarding this tree planting see: <http://www.streamlinkededucation.org/plantings/>

For more information on these and ongoing Maryland Chapter Sierra Club events visit: <http://www.sierraclub.org/maryland/calendar>

2016 Scholarship Program

The Catoctin Group of the Maryland Chapter of the Sierra Club is again proud to sponsor the Sierra Club John Muir Scholarship Program for High School Seniors enrolled in the Frederick County Catoctin High School Environmental and Conservation Academy.

We intend to offer financial assistance to a first year college or university student pursuing a degree that prepares them to protect and promote the responsible use of ecosystems and resources and to educate others in restoration of the natural and human environment.

To donate to the Scholarship Program see: <http://www.sierraclub.org/maryland/catoctin-group#scholarship>

Explore, enjoy and protect the planet

Study Says 100% Renewables by 2050 Possible

by Teresa Baker

Mark Z. Jacobson, a professor of civil and environmental engineering at Stanford University, and fellow researchers have developed a roadmap for each of the 50 states to transition to 100% renewable energy by 2050. Power demand is to be met by solar, wind, geothermal, hydroelectric and small amounts of tidal and wave where feasible.

By looking at four energy usage sectors — transportation, residential, commercial and industrial — the study was able to determine current energy demands for each state. The study then converted that usage analysis to electrical demand. The plan intends to replace all fuel demands with electricity, including vehicles and home and industrial heating and cooling systems. For each state sun exposure was calculated, wind maps were consulted and created, and the number of suitable rooftops for solar panels was determined in order to measure how the electric grid is to be powered.

While acknowledging that the individual plans demand bold changes to infrastructure and energy consumption patterns, Jacobson states that the transition is possible by implementing existing technologies. Economic costs of the conversion are expected to be offset eventually by improved energy efficiency and mitigation of pollution and human health costs related to the burning of fossil fuels.

Each state's energy demands are met by renewable energy that is available to that state. As an example, Maryland will utilize more offshore wind, around 60%, with only 22% demand from solar PV plants. Pennsylvania on the other hand will meet 68% of its demand through solar PV plants with only 3% from offshore wind. Pennsylvania's energy cost savings per year per person is greater: \$341 to Maryland's \$72. This is probably due to Maryland's plan relying heavily on offshore wind.

Each state analysis estimates the number of longterm jobs to be created, percentage of land needed for new generators, and annual energy, health and climate cost savings per person. Pennsylvania is predicted to gain \$12,000 in annual savings per person on energy, health and climate costs while Maryland is expected to enjoy a little over \$7,000 per person per year. Being a fossil fuel producer, Pennsylvania is expected to realize greater savings by the transition.

The researchers hope that by presenting a state by state plan that provides a means to convert our energy demands from fossil fuels to renewables, the social, political, and corporate barriers to realistic change can be overcome. The technology is available and economically possible. This study is another confirmation that finding the political will to change, not innovation, is the greater problem.

Resources:

Carey, Bjorn. (June 8, 2015) Stanford engineers develop state-by-state plan to convert U.S. to 100% clean, renewable energy by 2050. *Stanford News Service*. Retrieved from: <https://news.stanford.edu/pr/2015/pr-50states-renewable-energy-060815.html>

Interactive map available with state analysis at <http://thesolutionsproject.org/>

The Westminster Great Outdoors Sportacular Westminster Branch Library

Saturday, April 9 (11:00 am)
50 East Main Street
Westminster, MD 21157

Need help getting motivated to move in the great outdoors. Stop by the Westminster Sportacular to learn about rowing, hiking and even hang gliding from local club members. Enjoy a dog obedience demonstration in the library park.

Also come to meet Bill Heavey, long time contributor to Field & Stream magazine. Explore your outdoor sports adventure with ordinary people who live these dreams.

For more information: <https://library.carr.org/programs/calendar.asp>

Middletown's 1st Green Expo Earth Day Celebration Middletown Memorial Park

Saturday, April 23 (9:00 am - 12:00 pm)

Middletown, Maryland is hosting its first Earth Day celebration at Middletown War Memorial Park.

Festivities include:

8:00 am Bird Walk
9:00 am Welcoming Remarks
Spring Transplant Sale
Bike Parade
Tree Planting & Demonstration
Educational exhibits, vendors and more.

For updates on details of the day's events visit:
http://www.middletown.md.us/index.asp?SEC=9E6AE7F5-5EB6-4509-9DCC-51E7812600BC&DE=EE250048-CE45-47F9-A9B4-33914D89AA20&Type=B_BASIC

**Boonsboro Green Fest 2016
Shafer Park**

Saturday, May 7, 2016, 10:00 am to 5:00 pm

Come enjoy a day of live music, children's activities, good food and eco-themed vendors. The popular Drive-thru drop-off recycling zone and Gently-Used Clothing and Sports Equipment Swap are again a part of this year's activities.

Additional information: <http://www.boonsborogreenfest.com/>

Officers/Committee Chairs

Chairman & Energy

Dan Andrews

Treasurer

Anthony Iacovelli

Secretary & Outreach/Social Media

Amy Andrews

Conservation

Lew Sherman
Anthony Iacovelli

Invasive Plant Removal Stewardship

Carolyn Puckett

Outings

Harry George
Anthony Iacovelli

Membership

Patti Fredericks
Teresa Baker

Newsletter

Teresa Baker

For further information visit <http://www.sierraclub.org/maryland/catocin-group>

The next Executive Committee/General Meeting is scheduled for Saturday, April 2, 2016 from 10:00 a.m. to 12:15 p.m. at the Thurmont Regional Library, 76 East Moser Road, Thurmont, Maryland 21788 in Frederick County.

Executive Committee/General Meetings are usually 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.