



# Shawnee Trails



<http://www.sierraclub.org/illinois/shawnee>

**Sierra Club – Shawnee Group**

**December 2017 – February 2018 QUARTERLY**

## In This Issue:

Pollution, Climate Change, Health Pg 1-2

Winter Programs Pg 3

Winter Outings Pg 4

Cretaceous Hills Alert Pg 5

Sierra Club Calendars for Sale Pg 6

CAFO Update Pg 6

Contact Your Rep. Pg 6

Sierra T-Shirts for Sale Pg 7

Alternative Gift Fair Pg 7

Volunteer, Stan Harris Birthday Pg 8

## Shawnee Group Contact Information:

Shawnee Group Sierra Club

PO Box 117, Carbondale, IL 62903-0117

### Website:

<http://www.sierraclub.org/illinois/shawnee>

or <http://shawneegroup.blogspot.com>

**Chair, Membership Chair:** Jane Cogie

618-549-4673 [jane.cogie@gmail.com](mailto:jane.cogie@gmail.com)

**Vice Chair:** Carla Womack,

[crusso1957@yahoo.com](mailto:crusso1957@yahoo.com)

**Treasurer:** Patty Weyhrich

[pweyhrich711@hotmail.com](mailto:pweyhrich711@hotmail.com)

**Secretary:** John Magney 618-529-3194

[jmagney@siu.edu](mailto:jmagney@siu.edu)

**Program Committee:** Jane Cogie, John

Magney, Elizabeth Donohue,

[glendagreenhouse@gmail.com](mailto:glendagreenhouse@gmail.com)

**Legislative/Political/Lobbying Chair,**

**Conservation Committee:** Jean Sellar

[biojean@peoplepc.com](mailto:biojean@peoplepc.com)

**Conservation Co-Chair, Shawnee**

**National Forest Committee, Cool**

**Cities Initiative:** Barb McKasson

618-529-4824 [babitaji@aol.com](mailto:babitaji@aol.com)

**Outings Chair:** Steve Eberhart,

[eberpsy@icloud.com](mailto:eberpsy@icloud.com)

**Fundraising Committee:**

Carla Womack (native plant sale)

Barb McKasson (calendars)

**Hospitality:** (vacant, please volunteer!)

**Newsletter Editor, Webmaster:** Sabrina

Hardenbergh [sabrina@midwest.net](mailto:sabrina@midwest.net)

## Pollution, Climate Change, Your Health, Your Dollars

by Sabrina Hardenbergh

Many about-faces and contradictions have precipitated during 2017 concerning pollution regulation, climate change, and health, some of it ideological, some of it framed as “too expensive” and some of it just plain made up. Certain decision-makers seem to have amnesia that Republican Richard Nixon signed the Clean Air Act into law in 1970, along with establishing the EPA. Twenty years later, George H.W. Bush amended the Clean Air Act to better deal with ozone depletion, sulfur dioxide emissions, and acid rain, benefiting such things as the survival of Appalachia’s trees and countless asthma victims. The current administration is out of step with its century old predecessor [Teddy Roosevelt’s](#) Square Deal, anti-trust, food safety regulations, and the creation of the 1906 Antiquities Act, national parks, and the forest service, the latter several areas now partly recognized as among the means of preserving carbon sinks (although an early oil pipeline was permitted through Indian territory). Denial of human induced climate change is apparent in many, which mirrors [Exxon’s obfuscation of climate science](#). Despite cries about expensive pollution regulations, the denial of the cost of pollution – [monetary](#), [productivity](#), and in [lives](#) – is astounding.

In earlier decades we often [framed climate change as heat](#) and its impact on vulnerable elderly, drought stricken crop damage, and increasing disease vectors like mosquitoes that carry tropical malaria, or now Zika, West Nile virus and other pathogens. More recently, the relationship between industry and energy pollution and climate change has become further understood concerning the link with more of our modern health problems.

According to [recent reports](#), environmental pollution, such as filthy [air](#) and contaminated [water](#), kills more people each year than all war and violence in the world. More than smoking, hunger or natural disasters, AIDS, tuberculosis and malaria combined. One sixth of premature deaths in the world in 2015, about [9 million](#), could be attributed to toxic exposure. Ambient and household [air pollution is the largest contributor](#) to the burden of disease from the environment, including asthma, COPD, lung cancer, cardiovascular, and cerebrovascular morbidity and mortality, the major health problems in developed and developing nations. Considering nations to which Illinois proposes exporting fossil fuel, the health impact of air pollution in [China was about USD 1.4 trillion in 2010, and about USD 0.5 trillion in India](#). [Russia and Caspian Sea](#) nations face a [high toll](#) too. About [half](#) of the air pollution cost is (Continued on Page 2)

*(Pollution, Climate Change, Continued from Page 1)*

from the [road transport](#) sector. Pollution-related death, sickness and welfare is [\\$4.6 trillion](#) in annual losses, about 6.2 percent of the global economy. For scale, consider our National Healthcare Expenditure (NHE) for the entire United States was [\\$3.2 trillion and 17.8% of our Gross Domestic Product](#) in 2015. The [US is among the top 10 nations](#) for deaths from “modern” forms of pollution, that is fossil fuel-related air pollution and chemical pollution. While air pollution has cleaned up somewhat in [Illinois](#), it nevertheless is predicted to get worse with other climate and policy change, wherein particulate matter, ozone and other emissions will increase again without changes to chemical plants, power plants, transportation and energy efficiency.

With the proposed enactment of the Clean Power Plan, the [EPA projected 3,600 less premature deaths a year](#), along with 1,700 less heart attacks, 90,000 less asthma attacks and 300,000 less missed workdays and school days. Independent researchers estimated [3,500 fewer premature deaths](#) with the cleaner air from CPP, and an estimated net [\\$38 billion](#) in health and social improvements. Yet the EPA recently repealed CPP arguing that it cost industry \$33 billion for compliance.

Climate change has also altered the synchronization between flowering plant cycles and that of their [pollinators](#), impacting food production. [McGill University biologists](#), using herbarium and other records spanning a couple hundred years, find that for every one degree temperature rise, plants flower 2.5 to 5 days earlier. Various plant species are flowering approximately 2 to 2.5 days earlier now than ten years ago.

Carbon emissions contributing to this climate change are also turning our edible plants into less nutrient-rich junk food. In 1998, [Irakli Loladze](#), a mathematician, and biologists at Arizona State University, found that increased carbon dioxide increased green algae quantity, but with decreased nutrient density, such that zooplankton that fed on the algae grew more poorly. [Loladze](#) accumulated research on the increased carbon dioxide (CO<sub>2</sub>) relationship to increased volume and carbohydrate yield but decreased nutrient composition in many other plants -- negative health implications for animals, pollinators, and people. Less nutrient dense plants and their pollen impact bees, and USDA plant physiologist Lewis Ziska considers this among the various factors for pollinator colonies crashing. Wild fisheries also face decline.

While some of these scientists' earlier work was that of a lone wolf, consortiums of such climate-health researchers are now collaborating to understand the impact of climate change, such as the [Planetary Health Alliance](#) based out of [Harvard University](#). In addition to the lower nutrient density common to Big-Ag selective breeding and monocropping for higher volume yields the past 50 to 70 years, over the past couple decades [scientists are increasingly documenting that carbon dioxide increases plant growth and glucose content, but at the cost of less protein, vitamins and minerals like calcium, magnesium, potassium, zinc and iron](#) in the composition of the plants that we and animals eat. This trend implies a recipe for kwashiorkor, obesity, diabetes, hypertension, lipid disorders, cardiovascular disease, 10-year coronary heart disease risk, anemia, and many other ailments, even if you have access to and are mindful to eat a variety of your grains, fruit and veggies.

For 3<sup>rd</sup> World and other impoverished people who get their primary food intake from [staple food crops](#) like rice or wheat, the lower protein and mineral content from high CO<sub>2</sub> has grave malnutrition implications. About 150–200 million people will incur new onset of zinc deficiency, and a similar number will suffer protein deficiency from human induced anthropogenic CO<sub>2</sub> emissions. This adds to the more than 1 billion people with existing nutritional deficiencies who will be further stressed. In addition to the wasting of protein malnutrition (kwashiorkor), zinc deficiency leads to lowered immune system response to common infectious disease like [malaria, pneumonia and diarrheal infections](#). The prevalence of anemia is greater than 20% in 1.4 billion children under 5 years and child bearing age women, and they will further lose more than 3.8% of dietary iron because of rising CO<sub>2</sub> concentrations. All this comes at great [cost](#) in productivity, healthcare, and other intervention.

**WINTER 2017/2018 SIERRA CLUB PROGRAMS NOTE: Start time at 7 PM!**

Access Carbondale Township Hall (217 E. Main) via REAR entrance, a green door in the alley, across from Rock Hill Baptist Church (at Monroe and Marion Streets). The front door is locked! These programs are FREE and open to the public. Join us for refreshments and socializing before and after meeting.

**Thursday, December 14, 2017**

**Presentation:** Green Earth Nature Trails: Learn What Changes Are Coming

**Speaker:** Stephanie Eichholz, Executive Director, Green Earth

**Location:** Carbondale Township Hall

**Dinner:** TBA

**Thursday, January 11, 2018**

**Presentation:** Update: Shawnee National Forest

**Speaker:** Brendan Cain, Supervisor, Shawnee National Forest

**Location:** Carbondale Township Hall

**Dinner:** TBA

**Thursday, February 8, 2018**

**Program:** Screening and discussion of National Geographic's "[Before the Flood](#)" video, featuring Leonardo DiCaprio narrating on climate change.

**Location:** Guyon Auditorium, SIU Morris Library, Carbondale, IL

**Dinner:** TBA



**Shawnee Group Sierrans on the Shawnee Bluff Canopy Tour on a recent November weekend.**

## WINTER 2017/2018 SIERRA CLUB OUTINGS

### **Bulge Hole Ecological Area Hike, Sunday, December 3, 2017**

Meet by the Murdale sign in the Murdale shopping center in Carbondale before 10:30 am or at the Marion Rural King parking lot before 11 am. This will be a moderate hike of about 3 miles.

[Bulge Hole](#) features a [unique shelter bluff](#) and a chance to see abundant wildlife and rare plants. You must call Kevin Rohling at 618-694-8150 in order to go on the hike.

### **Service Outing, Sunday, December 10, 2017**

Winter creeper invasives pull at Fern Rocks Natural Area in Giant City State Park. Meet at 1:00 pm at the Giant City Visitor's Center. Bring work gloves (some available) and water. Wear appropriate shoes. We will pull for a couple of hours, then celebrate our accomplishments. Contact Barb at 618-5209-4824 or [babitaji@aol.com](mailto:babitaji@aol.com) to participate.

### **Giant City Red Cedar Trail Hike, Monday, January 1, 2018**

Meet at the Giant City Visitor's Center before 10 am. This will be a moderate hike of 3 miles. We will see bluffs and other beautiful views in Giant City state park. Resolve to start your new year out right by hiking and experiencing nature. Be sure to wear appropriate clothing and hiking shoes. You must call Bob Mulcahy at 618-942-6342 in order to go on this hike.

### **Sharp Rock Falls Hike, Sunday, February 4, 2018**

We will meet in the Murphysboro Hardees parking lot before 10 am, then drive together to [Sharp Rock Falls](#). We will walk through a scenic canyon and see the waterfall. Wear appropriate clothing and hiking shoes and bring water. You must call Steve Eberhart at 618-967-8690 to attend this hike.

### **Service Outing, Saturday, February 24, 2018**

Garlic Mustard pull by the Rambarger Trailhead (off of Godwin Trail) in Bald Knob Wilderness. Meet at 12:30 pm at the Murphysboro Ranger Station parking lot on the far west side of Murphysboro – right off of Walnut street. Bring work gloves (some available) and water. Wear appropriate shoes. The site is a short distance from the parking lot. We will pull for a couple of hours or so (judging by last year) or until we run out of garlic mustard to pull. Contact Barb at 618-529-4824 or [babitaji@aol.com](mailto:babitaji@aol.com) to participate.

January and March service outings TBA.



Bulge Hole Ecological Area



Sharp Rock Falls

### **Piasa Palisades Group Outings Chair:**

Carol Klinger, 618-288-5506, [ciklinger@yahoo.com](mailto:ciklinger@yahoo.com)  
<http://www.sierraclub.org/illinois/piasa-palisades>

### **Eastern Missouri Group Outings Chair:**

Doug Melville, 636-288-1055  
[douglas.k.melville@gmail.com](mailto:douglas.k.melville@gmail.com)  
<http://sierraclub.org/missouri/eastern-missouri>

### **Future Outings TBA:**

Updates listed on our or Illinois Chapter websites:

<http://www.sierraclub.org/illinois/shawnee>

<http://illinois.sierraclub.org/calendar>

Other short notice outings and events may be announced on our Facebook page:

<https://www.facebook.com/SierraClubShawnee>

## **Cretaceous Hills Ecological Restoration Project Advances to DEIS Comment Period**

Shawnee National Forest (SNF) has finally released its Draft Environmental Impact Statement (DEIS) for the Cretaceous Hills Ecological Restoration Project. The project is located in far southern Illinois in southwestern Pope County and southeastern Massac County. The Forest Service preferred alternative includes prescribed burning on about 15,000 acres; logging of non-native pines and small hardwood trees on about 3,200 acres; treatment of invasive plant species; development of vernal ponds as upland water sources for bats and amphibians; roadwork for commercial harvesting and development of firelines.

Illinois Chapter SNF Committee commented on this project during the scoping period in 2015. We are concerned about the disappearance of many native understory species in the forest, the spread of non-native invasive plants and the fact that the oak/hickory forest is in danger of being replaced by the understory beech/maple. Oaks are especially important for supporting many hundreds of species – more than any other kind of tree. We are also concerned about the effects of commercial logging and the usage of heavy machinery on the forest. For our entire comments from the 2015 scoping period contact [babitaji@aol.com](mailto:babitaji@aol.com)

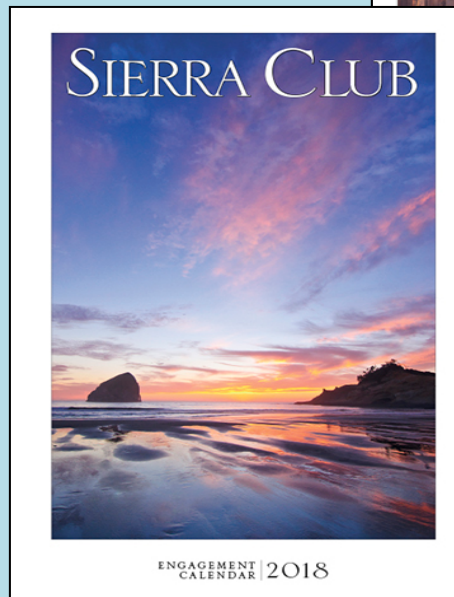
We will be examining the DEIS for site specific details and making further comments for Illinois Chapter. The comment deadline is **December 19, 2017**. The DEIS and supporting documentation are now available online at: <https://www.fs.usda.gov/project/?project=45129>

## **2018 Sierra Club Calendars Available!**

**Buy** at our monthly meetings this fall.

Or contact Barb McKasson  
([babitaji@aol.com](mailto:babitaji@aol.com)).

We also seek volunteers  
to sell calendars.



## **Volunteers Needed to Help Protect Shawnee National Forest**

Protecting Shawnee National Forest involves frequent communication with the Forest Service, research on issues, and educating others about those issues. We especially need help in keeping oil and gas wells out of the forest - including fracking wells. Please contact Barb at [babitaji@aol.com](mailto:babitaji@aol.com) if you are interested in helping in any way.

**Call for articles and photographs for Shawnee Trails!** The next issue will be published in December. Please send your Word, PDF or JPG files to [sabrina@midwest.net](mailto:sabrina@midwest.net) by **February 5th**.

### **CAFO Update – Patty Weyrich**

In Springfield on November 7, 2017, Senator David Koehler, D-Peoria, supported changes to the Illinois Livestock Facilities Management Act (LFMA) to protect citizens and the countryside from problems with Concentrated Animal Feeding Operations (CAFOs). He noted that farming has changed a lot since he grew up in a farming community and many small farms are being displaced by huge corporate farms, and that small farmers as well as rural communities can benefit from improved regulations.

Thank you again for your support. The hearing was a success. It has already been covered by the Chicago Tribune. The story is available here:

<http://www.chicagotribune.com/news/watchdog/pork/ct-pork-met-20171107-story.html> .



### **Illinois Legislative Contacts: CALL YOUR LEGISLATORS TODAY!**

State Dist. 109 Rep. David Reis: 618-392-0108 or 217-782-2087; [www.davidreis.org](http://www.davidreis.org)  
State Dist. 115 - Rep. Terri Bryant: 618-242-8115; 217-782-0387; [staterepterribryant@gmail.com](mailto:staterepterribryant@gmail.com)  
State Dist. 116 - Rep. Jerry Costello II - 618-282-7284; 217-782-1018 [Staterepcostello@gmail.com](mailto:Staterepcostello@gmail.com)  
State Dist. 117 - Rep. Dave Severin - 618-440-5090; 217-782-1051; [www.ilhousegop.org/contactseverin](http://www.ilhousegop.org/contactseverin)  
State Rep. 118 - Rep. Brandon Phelps - 618-253-4189; 217-782-5131; [bpphelps118@gmail.com](mailto:bpphelps118@gmail.com)  
Senate Dist. 55 Senator Dale Righter: 217-235-6033 or 217-782-6674  
Senate Dist. 58 - Senator Paul Schimpf: 618-684-1100; [senshimpf58@gmail.com](mailto:senshimpf58@gmail.com)  
Senate Dist. 59 - Senator Dale Fowler: 618-294-8951; 217-782-5509; [senatorfowler59@gmail.com](mailto:senatorfowler59@gmail.com)  
Governor Bruce Rauner: 217-782-0244, <http://www2.illinois.gov/gov/Pages/ContacttheGovernor.aspx>  
Speaker of the House Madigan: 217-782-5350; 773-581-8000; <http://www.housedem.state.il.us>  
Senate President Cullerton: 217- 782-2728; 773-883-0770; [jcullerton@senatedem.illinois.gov](mailto:jcullerton@senatedem.illinois.gov)

### **Congressional Contacts: CALL YOUR CONGRESSMEN TODAY!**

Senator Dick Durbin: 618-351-1122; 202-224-2152; <http://www.durbin.senate.gov/>  
Senator L. Tammy Duckworth: (202) 224-2854; <https://www.duckworth.senate.gov/>  
Representative Mike Bost: 618-457-5787; 202-225-5661; <https://bost.house.gov/>  
Representative John Shimkus: 618-252-8271; 202-225-5271; <https://shimkus.house.gov/>

The Illinois Chapter Sierra Club's Frack Fight Team is steered by Terri Treacy ([terri.treacy@sierraclub.org](mailto:terri.treacy@sierraclub.org)).

To receive periodic updates and communications from local and national Sierra Club, become a member of Illinois Chapter's Frack Fight Team:

[http://action.sierraclub.org/site/Survey?ACTION\\_REQUIRED=URI\\_ACTION\\_USER\\_REQUESTS&SURVEY\\_ID=138181](http://action.sierraclub.org/site/Survey?ACTION_REQUIRED=URI_ACTION_USER_REQUESTS&SURVEY_ID=138181)

**FYI**, to receive more timely alerts from the Illinois Chapter of the Sierra Club, sign up online at their state website: [https://secure.sierraclub.org/site/SPageNavigator/Chapter/il\\_newsletter\\_signup.html?jsessionid=84420F4C49A5A8CD264E1E3C3F131E25.app205a](https://secure.sierraclub.org/site/SPageNavigator/Chapter/il_newsletter_signup.html?jsessionid=84420F4C49A5A8CD264E1E3C3F131E25.app205a)



## Shawnee Group Sierra Club T-Shirts for Sale!

Show your support for our local group's activities. For sale at the Alternative Gift Fair and during our monthly meetings.

Color: White logo on blue T-Shirt

**\$15** Medium Large or X-Large

**13TH ANNUAL  
SOUTHERN ILLINOIS  
ALTERNATIVE  
GIFT FAIR**

**CARBONDALE CIVIC CENTER  
DECEMBER 3, 2017 • 2pm–5pm**

Live Holiday Music!  
Featuring: CUF Unitarian Folk Orchestra,  
CUF Recorder Group, Andrea Stader,  
& Ruth Ann Levinson

**Participating Groups Include:**

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>Friends of Giant City State Park</li> <li>Gift of Love Charity</li> <li>For Kids Sake</li> <li>Gaia House</li> <li>Good Samaritan Ministries</li> </ul>                        | <ul style="list-style-type: none"> <li>Peace Coalition of Southern Illinois</li> <li>The Science Center of Southern Illinois</li> <li>Friends of Carbondale Dog Parks</li> <li>Church Women United</li> <li>Teach My Kenyan Children</li> </ul> |
| <ul style="list-style-type: none"> <li>Friends of the Cache River Wetlands</li> <li>CUF Zambian AIDS Partnership</li> <li>Free Again</li> <li>Shawnee Chapter Sierra Club</li> <li>The Women's Center</li> </ul>      | <ul style="list-style-type: none"> <li>Fair Trade Chocolate and Coffee Sales</li> <li>Habitat for Humanity of Union and Jackson Counties</li> </ul>   |
| <ul style="list-style-type: none"> <li>The Diaper Bank of Southern Illinois</li> <li>Rainbow Cafe</li> <li>Humane Society of Southern Illinois</li> <li>Green Earth</li> <li>Marion Medical Mission</li> </ul>        | <ul style="list-style-type: none"> <li>Southern Illinois Immigrant Rights Project</li> <li>Friends of the Shawnee National Forest</li> </ul>  |
| <ul style="list-style-type: none"> <li>Boys and Girls Club of Carbondale</li> <li>Centerstone</li> <li>Shawnee Sentinels/ Heartwood</li> <li>Girls Rock Camp Carbondale</li> <li>Keep Carbondale Beautiful</li> </ul> | <ul style="list-style-type: none"> <li>Sponsored by the Carbondale Unitarian Fellowship Social Action Committee</li> </ul>  |

## Has Your Email Address Changed?

To receive notification when the latest Shawnee Group newsletter is posted online, be sure to inform the Group when you change your email address. Send email address updates to: [jane.cogie@gmail.com](mailto:jane.cogie@gmail.com)

Read current and past newsletters on our website: <http://www.sierraclub.org/illinois/shawnee>. The website also lists information on upcoming local programs and outings, plus state and national Sierra Club issues.

### Leadership Opportunities

**Run for the Board!** We need a few good women and men. Join the board of directors (the executive committee, also known as the ExCom) in overseeing the Shawnee Group's strategic direction and economic health. Board members meet monthly for about 2 hours. Board terms are for two years. We are always interested in potential candidates.

### **We need Hospitality team members**

Provide refreshments for one monthly meeting each year (2nd Thursday). Be the Hospitality Chair to organize refreshment providers and greeters OR Act as a greeter for a monthly meeting or welcome and assist our speaker OR Select and make reservations at a local restaurant for our monthly "Dinner Before the Meeting." Contact Jane Cogie, 618-549-4673 [jane.cogie@gmail.com](mailto:jane.cogie@gmail.com).

## Stan Harris' 100<sup>th</sup> Birthday Celebration! -- SAVE the DATE

Shawnee Group Sierra Club member, and SIU Geology Professor Emeritus, Stan Harris will be 100 years old on March 5<sup>th</sup>, 2018. A celebration will be held from **2:00 to 5:00 pm, Saturday, March 3<sup>rd</sup>, 2018**, at the Carbondale Unitarian Fellowship, 105 N. Parrish Lane, Carbondale, IL. All his many friends,

colleagues, and acquaintances are invited to attend. Whether you can attend or not, if you have a favorite memory to share with him, please send it to Marion Adams-Sai, 95 Edgewood Lane, Carbondale, IL to be included in a memory book. Stan and Clara McClure often led wildflower walks, where Stan would also often inform us of southern Illinois geology. Some years ago, the Shawnee Group Sierra Club would have summer swimming and potluck events at Stan's house.

