

# The Gnatcatcher

## Newsletter of Juniata Valley Audubon

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as a benefit for members of the...

JUNIATA VALLEY AUDUBON SOCIETY



### President's Message

## President's Message:

-Laura Jackson

### Mayday! Mayday!

Mayday is a word recognized all around the world as a distress signal. Originally, it was used by airplane pilots and ship captains, but now it is also used by firefighters and police. I'd like to add one more group to the list of users: Environmental/Conservation groups like Juniata Valley Audubon Society.

I'm calling out "Mayday" because this is our May/June newsletter and I'm in distress from all the assaults on our natural world. Perhaps the worst assault on our wildlife is H.R. 717, which attempts to gut the Endangered Species Act.

The Endangered Species Act (ESA) was passed in 1973 as a way of protecting animals and plants in danger of extinction: think Bald Eagles, Peregrine Falcons, and Whooping Cranes - brought back from the brink of extinction thanks to the ESA. Based on data from the U.S. Fish and Wildlife Service, the ESA has saved 99% of listed species from extinction. So, it works! Certain legislators, though, are more enamored with protecting business profits than species, so they want to weaken the ESA, or even kill it. Ironically, the ESA is in danger of extinction.

The Center for Biological Diversity (CBD) maintains a "Politics of Extinction" webpage that lists all the legislative attacks on the ESA. According to CBD, Congress launched a record-setting 135 attacks on the ESA in 2016.

The most immediate threat is H.R. 717: "To amend the Endangered Species Act of 1973 to require review of the economic cost of adding a species to the list of endangered species or threatened species, and for other purposes." Reps. Olson, Burgess, Gohmert, and Babin, all Texas Republicans, co-sponsored H.R. 717, which was introduced on Jan. 27 and referred to the House Natural Resources Committee. Not only would it give the Interior and Commerce Departments the power to reject a listing based on economics, it would also remove the 12-month deadline for making listing decisions, allowing officials to ignore the listing petitions for years. Decisions on listing are supposed to be made on the best available science, not on financial considerations.

Please contact your Rep. immediately to show your opposition to this bad bill. Most of us should call Rep. Bill Shuster at **202-225-2431** (D.C. office) or **814-696-6318** (Hollidaysburg office). Don't hesitate to talk to a staffer.

Not sure who your Rep. is? Check [www.house.gov/representatives/find/](http://www.house.gov/representatives/find/)

**Sample message:** My name is \_\_\_\_\_ and my zip code is \_\_\_\_\_. I am strongly opposed to HR 717, and I want you to vote against it. Endangered Species legislation should be based only on the best available science, not on financial considerations. Thank you.

The Juniata Valley Audubon Society (JVAS) is a chapter of the National Audubon Society and is dedicated to the conservation and restoration of natural ecosystems, focusing on birds, other wildlife, and their habitats for the benefit of humanity and the Earth's biological diversity. Juniata Valley Audubon accomplishes its mission through advocacy, science, land stewardship, and education - working directly with Audubon Pennsylvania, the Pennsylvania state office of the National Audubon Society.

The JVAS is a tax-exempt, not-for-profit, educational organization as described in section 501(c)(3) of the Internal Revenue Code. Gifts are deductible for income tax purposes (Tax ID # 25-1533496).

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- ◆ Marcia Bonta
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## Earth Day Birding Classic Projects

The 2016 Earth Day Birding Classic sponsored by JVAS and Penn State Altoona was held last year for the first time. Teams had a great time tallying birds in Blair and surrounding counties, plus they collected pledges to fund bird conservation projects. The donations were divided between JVAS and Penn State Altoona to help fund bird conservation projects.



Photo by Angela Spagnoli

### I. JVAS donated funds to Angela Spagnoli's Wetlands Restoration project

#### Restoration of a Wetland Habitat in Tipton, PA -Angela Spagnoli

*Angela Spagnoli is a graduating senior at Penn State Altoona. She is majoring in environmental studies with a focus on conservation. She has organized headwater stream clean-ups and participated in six missions to Costa Rica and Panama. There Angela worked with endangered sea turtles, took part in reforestation of abandoned banana plantations, and researched successional tropical rain forest plants. She has also participated in vernal pool and mangrove wetland conservation efforts. Angela is currently organizing the restoration of a wetland habitat and eBird hotspot, and an educational outreach program teaching local children and Penn State students the importance of these vital ecosystems.*

The Northern Blair County Recreation Center is located approximately 10 miles north of Altoona on East Pleasant Valley Boulevard. Driving by, you would never know the hidden treasure that lies just behind the Center's baseball field. An old wooden sign labeled "Wetlands Demonstration Area" stands at the foot of the trail, which runs parallel to the Little Juniata River. The 1 km trail loops around a 17-acre wetland habitat filled with wood frogs, spring peepers, salamanders, and 45 identified bird species. It is a breeding ground for snapping turtles and a refuge for deer in the winter.

## Earth Day Continued...

Although it seems to be a thriving ecosystem filled with wildlife, it is facing a detrimental problem. Invasive plant species (i.e. multi-flora rose and phragmites) have colonized the area. As we know, these plants can eventually replace the native species, leading to soil erosion and wetland losses.

As an aspiring wetland ecologist and conservationist, I have decided to utilize my environmental ethics course to focus on the restoration of this area. I have recently received a \$500 grant from JVAS, which I will use toward the seeding of obligate wetland plant species, upon the removal of invasives. Materials and guidance will be donated by Holly May of the National Resource Conservation Service. Additionally, the Little Juniata River Association will be extending its services through funding, publicity, and volunteers. Several Penn State Altoona professors will also be including their fall classes in our efforts. The Center's director aspires to use the area for community outreach and education. In the future, we plan to hold summer camps, teaching children about the importance of these vital ecosystems, and provide them with the opportunity to volunteer with restoration and maintenance. We will construct observation decks throughout the wetland so studies and identification can be conducted as non-invasively as possible.

Restoration plans will occur throughout the years to come, and with the support of our local conservation organizations and surrounding community members, we can create a highly functional and educational wetland ecosystem that will benefit the environment and our children.

### **II. The Penn State Altoona Sustainability Council, which received half of the pledge donations, awarded funds to Dr. Laura Palmer for research on bluebird nesting success in vented vs. unvented bluebird boxes at Canoe Creek State Park**

*Dr. Palmer is an Associate Professor in Biology at Penn State, Altoona. Her research concerns mechanisms of action of volatile anesthetics, signaling pathways in the regulation of protein synthesis, and translational control of gene expression. She teaches courses in introductory biology, cell and molecular biology, immunology, and genetics. She is an avid nature photographer and has recently become interested in conservation biology related to native cavity-nesting birds.*

#### **Bluebird Nesting Success**

##### **-Dr. Laura Palmer**

We have initiated a small pilot study to monitor nest box temperatures during the Eastern Bluebird breeding season at Canoe Creek State Park in Blair County, Pennsylvania. Previous studies in other parts of the country (e.g., Wisconsin) have suggested a correlation between environmental cold/heat cycles and nestling mortality rates for Eastern Bluebirds. As a way to facilitate maintaining optimal nest box temperature during the breeding season, the authors suggest using unvented boxes in colder climates and vented nest boxes in warmer climates (where temperatures can reach 100 F or more).



Photo by Laura Palmer

At Canoe Creek State Park, volunteers monitor approximately 100 Bluebird nest boxes during the breeding season. These boxes are primarily of the unvented design. Unvented nest boxes provide important protection from cold temperatures and other weather conditions in the early Spring in this climate. However, it is not uncommon for temperatures in this part of Pennsylvania to climb into the 90-100 F range for extended periods in mid-late summer. Thus, it is possible that nestlings hatched during the second nesting cycle are negatively impacted by elevated temperatures within the nest box. We are currently monitoring 10 nest boxes in our pilot study and will compare nest box success (number of bluebirds successfully fledged from each box) to nest box temperature. Funding from the Juniata Valley Audubon Society and the Penn State Altoona Sustainability Council was used to purchase the temperature monitors for the study.

This study will provide information regarding the appropriateness of the unvented nest box design in this climate. With the threats of global climate change upon us, we feel this study can inform us as to best practices for maintaining successful Bluebird nest boxes in this region. If results show that a negative correlation between nest box temperature and nest success (number of eggs hatched; number of fledglings) exists, this could lead to the design and implementation of more suitable nest boxes for the birds in this climate.

# JVAS Field Trips

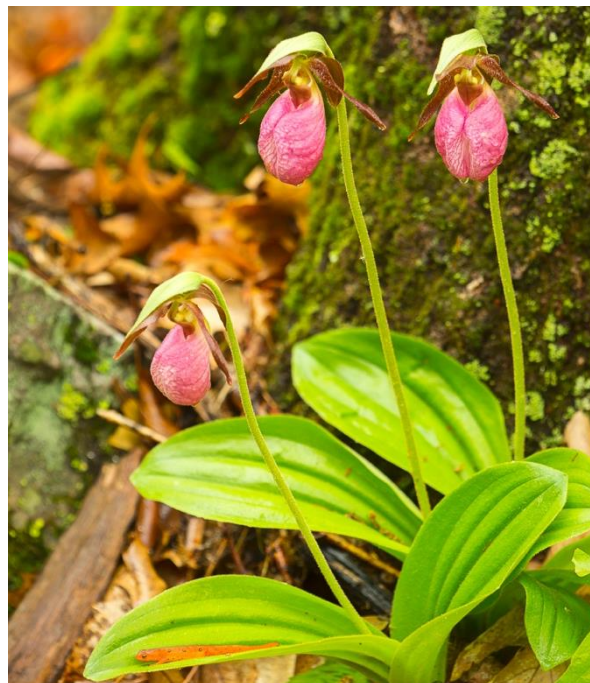
Our field trips, like our programs, tend to run from September through June. These are almost invariably on the weekends, and we try to have at least one a month. Unlike most Audubon chapters, we are not exclusively bird-focused. Many of our members are equally interested in things such as wildflowers, trees, reptiles and amphibians, wetland ecology, edible wild foods, mushrooms, geology, and more. Make a habit of attending JVAS field trips and you'll be sure to find out the surprises that nature has to offer! Contact field trip chair, Kristin Joivell, with any questions you may have at (814)386-6267.



Red Trillium, also known as Purple Trillium, and Wake Robin, has 3 color forms: white, red, and yellow. Red and yellow Trillium are shown in this photo taken by Laura Jackson.

**Plant vendors will have colorful native wildflowers, such as these Red Trillium. Pennsylvania Native Plant Society Sale Saturday, May 6 from 10 am to 3 pm Located on the spacious grounds of the Military Museum, 51 Boal Ave. in Boalsburg, PA.**

Buy native plants from a wide selection of vendors. Support JVAS by visiting our table and participating in bird activities, as well as purchasing bird-friendly coffee. Share some favorite bird sightings. We can even help you identify birds.



Pink Ladyslippers photographed by Laura Jackson

## **Wildflower Ramble at Rocky Ridge Saturday, May 13 from 11am to 2pm**

Late spring and early summer wildflowers at the Rocky Ridge Natural Area are a must see! Spectacular geologic formations provide the backdrop to wildflower blooms. Look forward to (hopefully) viewing pink and yellow lady slippers in profusion along with other distinctive wildflowers in this protected area. Unfortunately, plants don't bloom on a schedule, so come with an open mind and open eyes to make the most of what the season has to offer.

Rocky Ridge Directions: Travel on 26N out of Huntingdon. Travel past Cornpropsts Mills, if you get to Jackson Corner you've gone too far. Immediately opposite Wesley Chapel and Wesley Chapel Road, turn right onto Martin Gap Road. Take the left onto the bridge, then immediately turn right again. Watch for a Y in the road with a small wooden sign on the right labeled Frew Road. Take the right onto Frew Road. Park at the trailhead for the Standing Stone Trail and Rocky Ridge Natural Area. See the map from the Standing Stone Trail Club at the following: [http://media.wix.com/ugd/30a84d\\_63abe8a0b49403495afdedaf10e8281.pdf](http://media.wix.com/ugd/30a84d_63abe8a0b49403495afdedaf10e8281.pdf)



American Redstarts are colorful forest warblers photographed by Laura Jackson.

## Pennsylvania Migration Count (PAMC)

### May 13: All Day Saturday

Use eBird to document the peak of spring migration! It also coincides with the International Migratory Bird Day.

See details at [www.pabirds.org](http://www.pabirds.org).

Click on "Events."



## Tuesday, June 20, 2017: Maxine

### Leckvarcik Memorial Picnic 6 PM - 9 PM

### **NEW LOCATION: CANOE CREEK STATE PARK Pavilion #2, just off parking lot #6**

The summer solstice is approaching as the longest day of the year nears. Our annual summer picnic has many eats and treats for all tastes and appetites! Join us as we picnic together and celebrate another year of exploring and protecting nature in Central PA! After eating, we will have a nature walk from 7 to 8:15 PM. JVAS will provide roasted chicken for everyone. We hope everyone else will bring a covered dish to share.

We will end the evening with a visit to the bat church around 8:30 PM to see Pennsylvania's only flying mammals - bats! The bats exiting the church for their nightly feeding forays beat the odds of White-Nose Syndrome and their survival needs to be celebrated. Plan to stay until around 9:15 PM to see the bats.

Be sure to let Catie Farr or Laura Jackson know what you plan to bring. Call/email Catie at 570-651-3839 or [catiegk5059@gmail.com](mailto:catiegk5059@gmail.com) - or - call/email Laura Jackson at 814-652-9268 or [jacksonlaura73@gmail.com](mailto:jacksonlaura73@gmail.com)

## Saturday, June 24, 2017: Golden-winged Warbler Workshop 10 AM - 2 PM



1681 Dunkard Hollow Road,  
Alum Bank, PA 15521

We'll meet at John and Joanne Boggess' property, where a habitat improvement project for Golden-winged Warblers was completed in 2015. Biologist Emily Bellush and Forester Shannon Ferrell, Golden-winged Warbler experts, will explain the importance of healthy forests and how many species benefit from young forests. After the discussion, inside, we will eat lunch and then walk or ride to visit the habitat project. The workshop is rain or shine. Coffee, tea, fresh fruit, and juice will be provided.

What to bring: lunch, drinks, sunscreen, bug spray, walking stick, binoculars.

Directions to 1681 Dunkard Hollow Road, Alum Bank, PA 15521

### From Bedford, take Rt. 30 West to Schellsburg:

1. At traffic light in Schellsburg, take Route 96 North toward New Paris.
2. Travel approximately 7.4 miles to Ridge Market and gas station on left.
3. Turn **LEFT** onto Dunkard Hollow Road.
4. Travel 3.2 miles (road is windy).  
Slow down when you see mailbox on right (**1681**), you will then make a sharp **LEFT** onto driveway for 1681 Dunkard Hollow Road (open iron gate).
5. Follow driveway, staying to the right as you start up the hill.

### From Altoona, take I-99 South to Exit 3 and turn Right onto Route 56

1. Take Rt. 56 West to Pleasantville. At traffic light in Pleasantville, follow Route 56 West for 3.8 miles.
2. Watch for sign for RYOT, at the next intersection turn **LEFT** onto Dunkard Hollow Road (unmarked)
3. Travel 2.2 miles and take the next **RIGHT** onto driveway for 1681 Dunkard Hollow Road -- you will see the iron gate and also mailbox on right (1681)
4. Follow driveway, staying to the right as you start up the hill.

## JVAS Evening Programs: May and September

Our programs, designed for a general audience, are free and open to the public. We meet in the Bellwood-Antis Library at 526 Main Street, Bellwood, PA from January to May.

Directions: Take Interstate I-99 to the Bellwood/Route 865 Exit (Exit 41). Follow Rt. 865 through the Sheetz/Martin's intersection. Proceed about 4 blocks and turn right at the "Business District" sign, just before the railroad overpass. Turn left at the dead end and travel to the stop sign. Continue straight for a short distance; the library will be on your right.

**JVAS Programs start at 7 PM and end at 8:30 PM, but sometimes the lively discussions extend our meetings until later. We certainly understand if you must leave early!**

**Tuesday, May 16, 2017: *Climate Change Science Expedition in Churchill, Manitoba* presented by Kristin Joivell 7 PM - 8:30 PM**

With its short spring, summer, and fall seasons, the subarctic provides unique opportunities for research in climate change. In summer 2016, Kristin Joivell spent 3 weeks in Churchill, Manitoba assisting in collecting data from the ponds throughout the Hudson Bay Lowlands with Dr. LeeAnn Fishback, Scientific Coordinator of the Churchill Northern Studies Centre. Kristin will share photographs of the data collection process, in addition to reporting on inferences about climate change made by the scientists on the research project. Additionally, Kristin will have live organisms from vernal pools here in Pennsylvania (which are very similar to the organisms in the ponds in the subarctic) on hand for participants to observe. Come prepared to take a closer look at pond ecosystems in this interactive presentation!



churchillnorthernstudiescentre

To learn more about the Churchill Northern Studies Centre go to: [www.churchillscience.ca](http://www.churchillscience.ca)

Read the Earthwatch group blog about the expedition [www.climatechangeatthearcticsedge.wordpress.com](http://www.climatechangeatthearcticsedge.wordpress.com)

Mark your calendar for Tuesday, September 19 - our next JVAS Evening program, which will focus on Raptors with Falconer Mark Shields and, we hope, at least one live bird!

**Watch for more details in the September newsletter.**



**CONSERVATION CROSSROADS** is a new section of *The Gnatcatcher* that features environmental issues across a spectrum of local, national, and global concerns. Contact JVAS President Laura Jackson, if you know of an issue that deserves our attention and consequent action.

Background information on these concerns is found at [www.JVAS.org](http://www.JVAS.org). Click on the Conservation tab.

1. Hawn's Bridge Peninsula Development
2. Limestone Quarry near the Lower Trail in Blair Co., PA
3. Sunoco's Mariner East Pipelines across PA
4. CAFO in Catharine Twp., Blair Co., PA
5. CACAO Project linking Audubon to Honduras

## UPDATES:

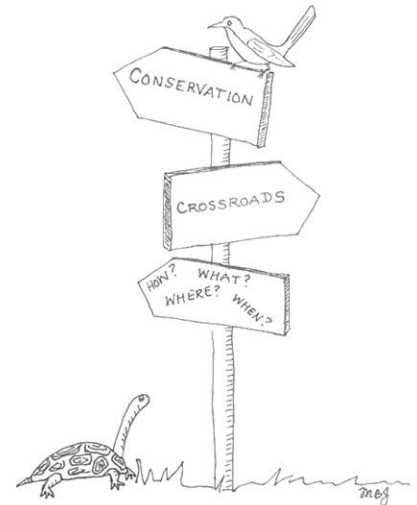
**Proposed Hawn's Bridge Peninsula Development:** Colonel Chamberlayne, Commander of the Baltimore District, US Army Corps of Engineers, has not issued his decision on the developer's request to lease 400 acres of Army Corps property, which includes the Hawn's Bridge Peninsula.

**Proposed Limestone Quarry near the Lower Trail in Blair County:** As of April 12, 2017, the developer has not applied for a large noncoal mining permit with the PA Dept. of Environmental Protection. Members are attending the Catharine Township Supervisor's meetings, which are held on the 3<sup>rd</sup> Thursday of each month in Williamsburg, PA. Township supervisors plan to work with PennDOT to address road concerns.

**Sunoco's Mariner East Pipeline:** Sunoco has filed a Writ of Possession for the easement on Gerhart's property in Huntingdon Co. The matter will go before Judge Zanic. A **writ of possession** is served following a default judgement or eviction lawsuit. The Sheriff is the person who serves the **writ** on the occupants and it usually has to be served to the tenant or occupants in person. The **writ of possession** often gives ample time before the eviction is enforced. Basically, Sunoco would have control of the Right of Way. The Army Corps of Engineers still has not approved construction on areas seeking jurisdictional determination. The Gerharts are planning to continue resistance to the pipeline. What can do you? Contact:

Governor Tom Wolf -  
Phone - 717-787-2500  
Fax - 717-772-8284  
Twitter - @GovernorTomWolf

Secretary McDonnell -  
Phone - 717-783-3004



## Talking points -

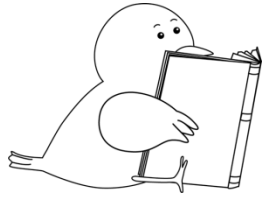
1. We demand a public participation process be established for Sunoco Logistics' resubmitted application for 105 and 102 permits for Mariner East II.
2. The public is being disenfranchised while Sunoco has advance information about DEP actions.
3. The process is being manipulated to Sunoco's advantage at the expense of private landowners.
4. We want a comment period of at least 60 days, hearings scheduled across the state, and an inclement weather plan so the most people can be heard.
5. The public has a right to review/comment on matters that impact us as adversely as the Mariner East does.
6. We don't need any more pipelines. Do the right thing. Deny the 105 and 102 permits.

**Proposed CAFO in Catharine Twp., Blair County:** The Environmental Assessment is still being reviewed.

**CACAO Project:** Members of the January 2017 CACAO Expedition to continue to analyze data collected on their trip to Honduras.

Updates on this issue will be posted at [www.JVAS.org](http://www.JVAS.org)

## Off The Shelf



We hope "Off The Shelf" will appear in every issue of *The Gnatcatcher*, but that will only happen if you send in your reviews of natural history books. We also welcome feedback. Email Laura Jackson to contribute a book review, or if you have a comment about a book that was reviewed. Please note that contributions for the next newsletter should be sent to Laura by **August 8, 2017**. Good reading!

### **FACING THE ANTHROPOCENE: Fossil Capitalism and the crisis of the Earth System** by Ian Angus Review by Doug Mason

At the International Geological Congress, last August in South Africa, 30 of 37 members of the Anthropocene Working Group (AWG) of the International Commission on Stratigraphy recommended the mid-20th Century as the approximate beginning of the Anthropocene Epoch (or "New Age of Man"). This would end the 11,700-year old Holocene (the "Recent Age"), which dates back to the ending of the last major ice age (modern man first appeared 200,000 years ago during the Pleistocene). Why does all this matter, you ask? Read this fascinating yet alarming book by Ian Angus for more answers than I could possibly list here.

In 2005, two large-scale projects independently identified the mid-point of the last century as a turning point in Earth history termed the "Great Acceleration." After World War II, anthropogenically-induced changes of climate, land use and biodiversity began to increase very rapidly, leading to the recognition that humans are an integral part of the Earth system rather than merely an external forcing factor. The AWG will spend the next three years looking for a suitable geologic marker of this transition to the Anthropocene.

Soil with radioactive particles from atmospheric nuclear weapons testing is one possible medium being considered to mark the boundary (tree rings, corals, ice cores and lake-bed/seafloor sediments also trap chemistry nicely. Also being examined are micro-plastics and nitrogen in the world's oceans). As a soil scientist with a keen interest in nuclear disarmament, I like the first option. I could even suggest an exact time and date to mark the beginning of the Anthropocene: 5:29 a.m. MST on July 16, 1945. Trinity was the code name of the first atomic detonation as part of the Manhattan Project in the Jornada del Muerte desert 35 miles from Socorro, NM (now part of White Sands Missile Range). The geological training I've undergone also demands I point out a new kind of rock recently found in Hawai'i. Neither plastic nor stone, plastiglomerates are a composite of melted plastics, marine debris and volcanic rock (from lava pouring into the oceans). Their discovery, along with over 200 other kinds of technofossils identified by geologists," confirms human capacity to change the geological record for the era in which we live.

A large book could be written about each of the nine planetary boundaries that are at risk today and still the account would be incomplete. But Angus does a superb job in covering those topics in short-hand. We are all familiar with the fact that since 1750, the atmospheric concentration of carbon dioxide has increased by about a third (from 280 to 400 parts per million), primarily due to the combustion of fossil fuels and land use changes. Approximately two-thirds of that increase (around 70 ppm) has taken place since 1959. I remember when I first came across the "hockey stick graph" pattern demonstrated by the research of Michael E. Mann, Raymond S. Bradley and Malcolm K. Hughes in the late Nineties. The basic conclusion of Mann et al. (1998, 1999) was that the late 20th Century warmth in the Northern Hemisphere was unprecedented during at least the last 1,400 years (maybe tens of thousands of years). Dr. Mann spoke at his beloved Penn State in January on "How to Heal Earth's Climate" as part of the series, Lectures on the Frontiers of Science. As the slide flashed his famous temperature anomaly graph on the screen, Mann pointed out that many other data streams collected by other scientists are also "hockey league" figures.



## Off the Shelf continued...

In the Angus book, two dozen Earth System and Socioeconomic Trends also chart in the hockey league, that is, showing continuing acceleration. One graph, Stratospheric Ozone Depletion, appears to show a small decline as a result of the Montreal Protocol, an international treaty banning many of the chemicals (chlorofluorocarbons and nauseam) that are known to destroy ozone. A telling story recounts how we narrowly dodged that bullet in one planetary boundary. As with climate change, we are not so fortunate with some geochemical flows and our world is imperiled. Since 1960, flows of reactive (biologically available) nitrogen in terrestrial ecosystems have doubled, and flows of phosphorus have tripled. More than half of all the synthetic nitrogen fertilizer, which was first manufactured in 1913, ever used on our planet has been utilized since 1985.

While the author can be preachy, even strident, at times in this important political treatise, I strongly recommend this read for a look through the past to the future, and what we might want to do about any unfortunate possible blow-back.

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enclosed Membership Form  
for details.**

**JUNIATA VALLEY AUDUBON**

PO BOX 42

TYRONE, PA 16686-0042

*Address Service Requested*

**Support “our birds” on their wintering grounds by purchasing organic shade coffee from Honduras.**



Cultivated by a small group of farmers in Maracala, Honduras, Lenca coffee is one of the best Arabica coffees in the world. Emilio Garcia and his family have been cultivating coffee since 1915. The Garcia family partners with Sustainable Harvest Specialty Coffee Importers in Portland, Oregon so they can direct market their top quality coffee in the U.S. You can purchase green coffee or medium roast coffee. Contact Laura Jackson for details: 652-9268

Like Café Lenca at [www.facebook.com/CafeLenca](https://www.facebook.com/CafeLenca)

**Café Lenca Coffee will be sold at JVAS Meetings: 1 lb. bags are \$12 and 2 lb. bags are \$22. The roasted coffee is available as whole bean or ground.**