

# Appalachian Footnotes

Delaware Valley Chapter • Appalachian Mountain Club

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**and more!**

*Lehigh River near Slatington,*

## **The Lehigh River: one of the 10 most endangered rivers in the country**

**This according to a report released by conservation organization American Rivers**

The Lehigh River is the second largest tributary to the Delaware River. It is a vital regional resource for fresh water and recreation. It provides more than 30 miles of class 2-3 whitewater most of the year.

Now a poorly planned proliferation of warehouse and distribution centers threatens the river's health. American Rivers is a conservation organization (our chapter has been a financial contributor for 30 years), and they placed the Lehigh as number seven on this year's list of America's Most Endangered Rivers. They are calling on decision makers to improve protections for the river in order to safeguard clean water.

According to Lia Mastropolo, Director of Clean Water Supply at American Rivers, "The Lehigh is the backyard river for half a million people, and the keystone to Northeastern Pennsylvania's outdoor recreation industry. But unprecedented development of open space for warehousing and distribution centers now threatens the region's clean water and wildlife, and the communities and economies that rely on them."

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### **Annual AMC Delaware Valley Chapter Picnic**

**Sunday, July 9, 1 to 5 PM**

**Along beautiful Lake Galena at Peace Valley Park near Doylestown, PA, at Pavilion 5**

**RSVP, map and directions, [click here](#) or check the activities calendar.**

The whole family is invited! Feel free to bring a frisbee, badminton set or any outdoor game you like.

We will provide complimentary hot dogs, hamburgers and veggie burgers.

Please bring a main dish, side dish or dessert to share and a non-alcoholic beverage. (Alcohol is not permitted in the park.) Thinking green, please bring a reusable plate, cup and utensils.

Plan to hike or bike Sunday in and near the park and then join us at 1 PM for a picnic feast.



# Butterflies

By Eric Pavlak

Butterflies and moths are insects of the order

Lepidoptera, one that world-wide has 180,000 species in 126 families, an amazing ten percent of the number of all known living species. There are butterflies and moths native to all continents except Antarctica, and they live in a wide range of habitats: tropical rain forests to parched deserts; both fresh and salt marshes; hardwood, conifer and boreal forests; arctic tundra, coastal dunes and mountains as high as 20,000 feet. And in our back yards.

The term Lepidoptera was coined by Carl Linnaeus himself in 1735, when he was first developing the modern system of naming and describing organisms. The name comes from classic Greek and means scaly wings. If you were to examine a butterfly wing with a strong magnifying glass or a low power microscope, you would see that the wings are covered with tiny scales that overlap like roof shingles.

The brilliant and often iridescent colors of the wings come from two sources: pigment and structure. The scales have surface slits that can act like a diffraction grating (look it up!). This effect can be seen when it is produced by the fine grooves on the underside of a DVD or CD. Coloring has evolved to confuse, dazzle or hide from predators, and to intimidate them. For example, spots that look like eyes.

All start life as eggs, hatch into caterpillars, then enter a pupa stage in which they metamorphose into adults, the ones with the pretty colored wings. In most species, adults quickly find a mate, the females lay eggs, and both genders die, often after just a few days. In some species, they may live for months.

All are very important parts of their local ecosystem. It takes thousands of caterpillars to raise a nest of baby song birds. Even birds that are herbivorous as adults feed their young on caterpillars. Doves and pigeons are almost the only exception.

Native caterpillars eat native plants. Native plants are tolerant to this. Invasive plants such as Autumn Olive or Japanese Knotweed offer no food to local caterpillars, and thus no food for birds. Native plants have little or no protection from invasive caterpillars. The invasive gypsy moth can ravage and kill an oak forest, and only a few species of birds will eat the large, hairy caterpillars.

Butterflies and moths are important pollinators. They are capable of pollinating flowers that bees and wasps cannot, and because they are not linked to a hive and can cover longer distances, can spread pollen wider and help with genetic diversity.

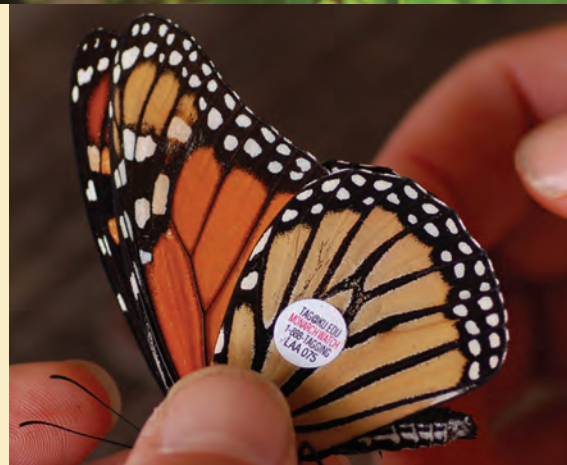
Your eyes see in three colors. Your dog's and cat's eyes see in two. Butterfly eyes see in four colors, and can see colors in the ultraviolet range. Flowers often have colors that are in this range, beyond human vision, but in plain sight for a butterfly.

If you want to have butterflies in your garden, the worst thing you could plant is butterfly bush (genus *Buddleia*), a nasty, aggressive invasive, illegal in some states. While it attracts adult butterflies, no native caterpillars will eat the leaves. You will attract adults, but starve their offspring and starve local baby birds. Instead, plant any of the beautiful, fragrant milkweed species, or the native Purple Coneflower, *Echinacea purpurea*, or other native species. Almost any native flowering plant will attract butterflies.

Moth or butterfly? Moths are generally active at night; butterflies during the day. The antennae of butterflies end in little knobs, while moths have feathery antennae.

Butterflies can fly 10 or more miles point to point in a day. One migrating monarch tagged in Cape May traveled to a Virginia island at the mouth of the Chesapeake Bay, mostly over open water, in one day. The one day monarch travel record is 265 miles!

**Continued on the next page**



Thanks to Monarch Monitoring Project, Cape May Bird Observatory, Cape May Point, NJ. Photos from Wikimedia Commons.





The Luna Moth (*Actias luna*), top left, and the Polyphemus Moth (*Antheraea polyphemus*) bottom left, have feathery antennae, while the Cabbage White (*Pieris rapae*) has plain antennae with lobed ends characteristic of butterflies.

## Butterflies

### Continued from previous page

The greatest threats to butterflies and moths are habitat loss and destruction, pesticides and climate change.

Habitat loss can be as simple as converting a meadow into a lawn. For example, a vacant lot covered with what most people would consider weeds is a rich feeding ground for butterflies. Build on that lot and plant a lawn in place of the "weeds," and, as far as butterflies and birds are concerned, you might as well pave it with asphalt.

All the butterflies shown here are local species, and are easy to observe. You just have to take the time.



### Emerging AT leaders summit set for Mohican Oct 6-8; for committed leaders 18 to 30

#### *No fees for registration, meals or lodging!*

The Appalachian Trail Conservancy's (ATC) Emerging Leaders' Summit will be held at the Mohican Outdoor Center in Blairstown, New Jersey, October 6-8

The goal is to bring together a diverse group of leaders, ages 18-30, looking to expand skills and stewardship for the outdoors through connection, action, and expression.

There are no registration fees, and lodging and meals are included for all participants. Travel stipends may be provided based on need. Participants will choose a camping experience or stay in a shared cabin with bunks. No experience is required, however a commitment to learning and interest in the Appalachian Trail is expected.

For more information, go to: <https://appalachiantrail.org/our-work/conservation/education-and-outreach/emerging-leaders-summit/>

## Appalachian Footnotes

news from the

Delaware Valley Chapter  
Appalachian Mountain Club

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# To light a campfire: a story

By Richard Puglisi

**(Fires should only be built where safe and permitted, Extinguish all fires when done, and never leave fires unattended.)**

I'll never forget that night. It was only a few years ago. I don't remember the campsite, but I'll never forget the feeling of not being able to get that campfire lit. It was a wet summer that year and the logs and branches were damp, even the kindling. I tried lighting that fire a number of times. At one point I even had a nice little blaze, but the bigger branches were just too wet to burn. And now all of my wooden stick matches were gone except one. I just couldn't imagine sitting in a dark campsite.

Since time immemorial, campfires have been an important part of life. It was about 400,000 years ago, when early man learned to produce fire on demand by striking together two pieces of stone. This ability made it possible to generate heat to stay warm in winter, to cook food and generate light at night to keep away predators. The Native Americans were known to gather around the council fire to conduct their tribal affairs. And I can still recall that Fredrick Remington painting of cowboys sitting safe and secure by the campfire at night.

I had built many a fire in my time, and I thought back on all I knew about fire building. The essential elements of tinder, kindling, and fuel. How the three items needed for fire to burn are fuel, heat and air, and without one of these, a fire will stop burning. And just how important a base of hot coals are to a good fire.

Finally, the common types of campfires such as the criss-cross or log cabin vs the teepee or half teepee.

The Greek physician Hippocrates was known to say that "desperate times call for desperate measures."

So maybe it was a bit of camper pride or just plain stubbornness that prompted me to pull out the old candle stub fire starter from my outdoor bag of tricks. I lit it and placed it under the larger branches. After a while the branches started burning and soon sparks and flames were leaping high into the sky. It was almost as if the fire was alive and dancing!

In looking back, some fires are just more challenging than others, and sometimes it takes a little luck or a good fire starter.



**Our 2023 AT Ridgerunner Piljo Yae** is busy this summer, not only patrolling a large section of the AT, helping hikers and taking on many other tasks. Here she is repainting blazes during her training at the Water Gap..

She is a chapter member and a 2022 thru-hiker who had the trail name WIC.

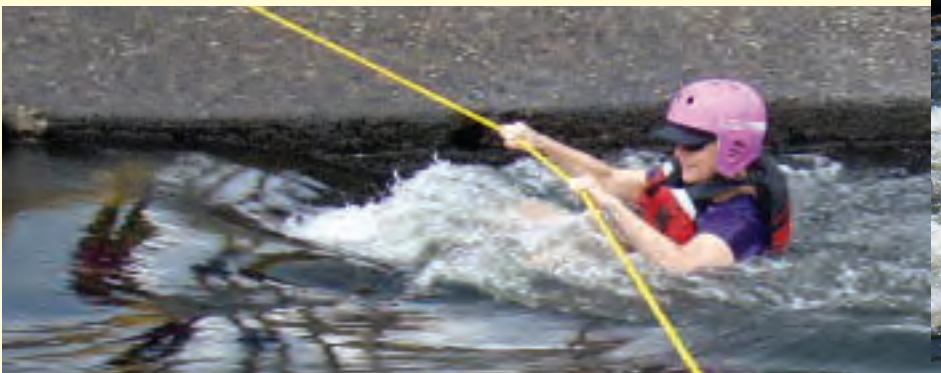
The Ridgerunner program is entering its 31st year, and is a cooperative effort to protect and care for 42 mi of the AT by our chapter, ATC, PA DCNR, AMC, the Allentown Hiking Club, the Batona Hiking Club, and the Keystone Trails Association.

*Photo by Dan Schwartz*

## Paddling water safety course offered

Our annual **swiftwater safety** session will be held July 22 at the Lambertville Wing Dam on the Delaware River, \$10 members, \$25 non-members. This course, or the equivalent, is required for those who want to become paddling leaders. It is a good course for all paddlers.

For more information, go to <https://activities.outdoors.org/search/index.cfm/action/details/id/143709> or contact the leader at [paddling@amcdv.org](mailto:paddling@amcdv.org)





# Lehigh River at risk

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The Lehigh Valley has become the logistics hub of the eastern seaboard, with warehouses and distribution centers already covering more than four square miles of land within the watershed. According to the Lehigh Valley Planning Commission, there's roughly another square mile of development in the pipeline.

This poorly planned development threatens the Lehigh River by converting critical forest and wetlands to hard surfaces—roofs and parking lots. These impervious surfaces prevent rainwater from soaking into the ground. Instead, warm, salty, dirty water runs off the pavement directly into the river and its tributaries. This flooding and pollution, and the paving of the remaining open space in the urban stretches in the Lehigh Valley, disproportionately impact downstream communities that have already borne the brunt of environmental degradation and climate change.

It should be noted that few of the rooftops of these vast single-story buildings hold solar collector panels. This at a time when solar and wind have passed coal as a source electrical power generation. (*E&E News*, May 2023)

"Distribution centers, in their scale and speed paving over land in the Lehigh River watershed, are permanently altering how the water flows across the landscape," said Donna Kohut of Citizens for Pennsylvania's Future.

"By recognizing how these land use changes endanger the Lehigh – a river that has long suffered from harmful industry impacts – we can focus on prioritizing solutions to protect it from further degradation. We must educate local municipalities and residents about the impacts and pass statewide legislation to ensure these waterways have forested riparian buffers that protect water quality and wildlife habitat. And we must protect what is already pristine so we can invest in the downstream waters that are increasingly impaired and degraded."



*Lehigh whitewater below Black Creek confluence.*  
Wayne Albrecht photo.

American Rivers and its partners have called on state and federal leaders to make crucial funding and legislative decisions to protect water quality from land development throughout the watershed. This includes fully funding the Delaware



*AMC group paddling the Lehigh above Walnutport*  
John Chalikian photo.

River Basin Commission, which oversees water quality protections for the Lehigh and other rivers in the basin, and supporting other state and federal programs to manage development wisely.

"We've seen the impact that unchecked distribution center development has had on the Lehigh River valley," said Jim Vogt of the Aquashicola/Pohopoco Watershed Conservancy. "As the industry has its sights set on cheaper land up north, we must hold strong against this tide in the upper Lehigh River watershed and protect Poconos headwaters from this same degradation."

"Protecting all watersheds in the Poconos is critical to the economic vitality of the entire Lehigh River region," says Rich Trosciancki, President of the Board of Directors for North Pocono CARE. "Much of this region relies on the influx of tourists to sustain the local economies. The onslaught of unchecked development will severely impact the economic vitality of the tourism in the region."

From its headwaters in the boreal forests of the Pocono Plateau, the Lehigh River flows 109 miles to its confluence with the Delaware River in Easton, Pennsylvania. The river valley is the ancestral home of the Lenape people, and includes present-day cities of Allentown, Bethlehem and Easton. The river's name comes from the Lenape name for the river, Lechewuekink, which means "where there are forks."

Part of the Lehigh River is designated as one of Pennsylvania's Scenic Rivers, and the headwaters are designated as Exceptional Value. The river is a direct drinking water source for hundreds of thousands of people, and as a tributary to the Delaware River, supports the drinking water supply of millions.

You can download the two page report at [https://www.americanrivers.org/wp-content/uploads/2023/04/Lehigh-River\\_AR\\_2023-Most-Endangered-Rivers-7.pdf](https://www.americanrivers.org/wp-content/uploads/2023/04/Lehigh-River_AR_2023-Most-Endangered-Rivers-7.pdf)

—Compiled and written by Eric Pavlak