

# **PLEON Workshop Series** Announced



Join us for the 2019 PLEON Workshop Series!

Learn more about the ecology and management of lakes in the Poconos. Workshops feature presentations by lake researchers with hands-on activities, moderated question and answer periods, and open discussions with experts in the field of lake ecology and water guality. Workshops held at Lacawac Sanctuary and are free of charge. For more information or to register visit www.lacawac.org/workshops



# June 9<sup>th</sup> **Ecology of Aquatic Plants**

Presented by Elizabeth Carroll, Holy Family University

Explore the diversity and importance of aquatic plants. Learn to identify and protect against invasive species.

# July 6<sup>th</sup>

## **Promoting Good Lake** Stewardship

Presented by Craig Williamson, Miami University of Ohio What makes for a healthy lake? Learn the ecological principles behind good lake management strategies.

## August 3rd Harmful Algal Blooms

Presented by Lauren Knose, Miami University of Ohio

Wondering what harmful algae are and if they're in your lake? Discover why blooms form and which species may be harmful.

For more information contact Beth Norman, Director of Science and Research at 570.689.9494 or email beth.norman@lacawac.org

# Spring 2019 Newsletter

# Field Trips to Lacawac

Lacawac provides hands-on, minds-on experiential environmental education field trips for public and private schools and groups! All environmental education field trip programs are aligned to Pennsylvania Academic Environment & Ecology Standards with a focus on STEAM content.

Sense of Wonder - Grade: PreK – K Earth Cycles - Grade: K-1 Amazing Adaptations - Grade: 1-2 Nature Detectives - Grade: 2-3 Watershed Connections- Grades: 3-5 Forest Ecology - Grades: 5-7 Hands-on History and Geology at Lacawac Grades: 6-9 Advanced Water Ecology - Grades: 9-12

For more information or to schedule a field trip contact Jamie Reeger, Director of **Environmental Education at** Jamie.reeger@lacawac.org or call 570.689.9494

LACAWAC SANCTUARY FIELD STATION & ENV. ED CENTER

2019 Programs

Join Lacawac Sanctuary for these environmental education programs and events in 2019.

### April 20 - Spring Edibles Hike

#### 10 am - 11:30 am / \$5 Member, \$10 Non Member

Let Nathaniel Whitmore from the Delaware Highlands Mushroom Society share his wealth of knowledge about wild edibles and how they are enjoyed by wildlife and humans. This is a short distance hike. Wear comfortable footwear. All ages welcome.

### May 4 - In Search of Spring Migrants

#### 8 am - 10 am / Free Program

Join experts from the NEPA Audubon Society on a hike through the Sanctuary in search of spring migrants on their journey home. Wear comfortable footwear, binoculars suggested. All ages welcome, registration appreciated. Free program.

#### May 4 - Volunteer Work Day

#### 9 am - 12 pm

Join us for a volunteer work day to get Lacawac's trails and property ready for the summer season. Bring gloves. Lacawac will provide tools and equipment.

#### May 18 - Amazing Animal Adaptations

**10 am - 11 am/ \$10 adults, \$5 child, Free 3 and under** Join Pocono the Pocono Wildlife Rehabilitation and Education Center for this one hour LIVE wildlife presentation as they share the amazing adaptations that our native birds, mammals and reptiles possess to survive in the wilds of Pennsylvania's Woods. This presentation is suitable for all ages.



### May 19 - Spring Afternoon Tea

#### 2 pm – 4 pm / \$27.50 per person

Lacawac hosts this intimate country tea at our historic Watres Lodges in celebration of spring. It's a traditional tea. You will be treated to scones, egg salad and chicken salad sandwiches, and various cookies and pastries. Hot teas and iced teas will be served. The table will be set with dishes and teacups from Lacawac's collection. Come and enjoy a relaxing afternoon and learn about Lacawac's history.

#### June 15 - Afternoon Paddle on Lake Lacawac

#### 2 pm - 4 pm / \$10 members, \$15 Non Member

Enjoy a scenic afternoon canoe paddle on Lake Lacawac. Boats, paddles and life jackets are all provided. Personal life jackets may be used. All ages welcome. Reservations required as spaces are limited.

# June 29 – Spotted Lanternfly: What you need to know!

#### 10 am – 11 am / Free Program

The Spotted Lanternfly is an invasive species that presents a significant threat to Pennsylvania's agriculture. Learn more about what you can do to help stop the spread of this invasive species.



#### July 14 - Summer Tea Party

#### 2 pm – 4 pm / \$27.50 per person

Summer is the perfect time to head outdoors to enjoy the weather, good friends, and great tea. While the idea of a tea party may seem old fashioned, it's actually part of the appeal — it's a great traditional way to enjoy fantastic food, drinks, and company at the Historic Watres Lodge!

#### July 20 – Everything Bears

#### 10 am - 11:30 am / Free Program

Are you confused or unsure about bears? Whether they are brown or black, bears can be intimidating and downright scary if you don't know what to expect or how to co-exist with them. Join Upper Delaware Scenic & Recreational River Park Ranger Susie Kaspar for an informative talk on bears with topics ranging from their life cycle, to bear proofing your home.

# August 17 - Close Encounters with Live Birds of Prey

10 am - 11 am / \$10 Adult, \$5 child, Free children under 3 Lacawac Sanctuary is proud to present the Delaware Valley Raptor Center's live birds presentation in our historic Carriage House barn. Let these magnificent creatures captivate you! Eagles, owls, falcons and hawks will take the stage.

#### September 21 - Mushroom Hike

#### 10 am - 11:30 am / \$5 Members, \$10 Non Members

Let Nathaniel Whitmore from the Delaware Highlands Mushroom Society share his wealth of knowledge about wild edibles and how they are enjoyed by wildlife and humans. This is a short distance hike. Wear comfortable footwear. All ages welcome.

#### September 28 - Fall Migrants Hike

#### 8:30 am - 10:30 am / Free Program

Join experts from the NEPA Audubon Society on a free hike through the Sanctuary in search of fall migrants on their journey south. Wear comfortable footwear, binoculars suggested. All ages welcome, registration appreciated.

#### October 5 - Fall Foliage Hike

#### 10 am - 11:30 am / Free Program

Ever wonder why the leaves turn the colors that they do? Lacawac Sanctuary is a great place to witness autumn at its best, come and enjoy the foliage while learning a little about why fall is such a special time of year. Please wear comfortable footwear. All ages welcome, registration appreciated.

#### November 3- Autumn Tea Party

#### 2 pm - 4 pm / \$27.50 per person

An Autumn Tea Party is a perfect time to treat yourself, friends, and family to a beautiful respite during the fall busy season. Autumn and tea go hand in hand with the stormy weather, gorgeous fall colors, seasonal occasions to gather, creating a warm and memorable gathering that will be remembered throughout the cold days of winter.

For more information on our programs and events or to register visit lacawac.org/education-programs

Lacawac Sanctuary Environmental Education Center

94 Sanctuary Rd, Lake Ariel PA 18436

570.689.9494

www.lacawac.org



# Four Reasons You Should Volunteer!

#### You Should Make Volunteering a Part of Your Everyday Life

With busy lives, it can be hard to find time to volunteer. However, the benefits of volunteering are enormous to you, your family, and your community. The right match can help you reduce stress, find friends, connect with the community, learn new skills, and even advance your career. Giving to others can also help protect your mental and physical health.

Volunteering offers vital help to people in need, worthwhile causes, and the community, but the benefits can be even greater for you, the volunteer. Volunteering and helping others can reduce stress, combat depression, keep you mentally stimulated, and provide a sense of purpose. While it's true that the more you volunteer, the more benefits you'll experience, volunteering doesn't have to involve a long-term commitment or take a huge amount of time out of your busy day. Giving in even simple ways can help those in need and improve your health and happiness.

Here are four reasons you should consider making volunteering a part of your everyday life.

#### 1. Volunteering establishes strong relationships.

Despite all of the online connections that are available at our fingertips, people are lonelier now than ever before. Online connections, while useful for maintaining existing relationships, are not very helpful in establishing lasting, new ones. Working alongside people who feel as strongly as you do about supporting a particular cause creates a path to developing strong relationships with others. It isn't just beneficial for making new friendships either. Volunteering alongside other members of your family strengthens family bonds based in "doing" your values. And these benefits have a ripple effect. Children who volunteer with their parents are more likely to become adults who volunteer.





#### 2. Volunteering is good for your career.

People who volunteer make more money, partially because the relationships people create while volunteering can be leveraged for financial benefit. In 1973, a John's Hopkins Sociologist named Mark Granovetter described the important role of "weak ties." Weak ties are those relationships that are outside of one's close-knit social network. These relationships are important because they provide access to new information and opportunities. People in your close network provide redundant information—they are already participating in the same kinds of activities and know the same people. Volunteering has long been viewed as a way to create new "weak tie" connections that lead to career opportunities.

#### 3. Volunteering is good for society.

Many businesses, and almost all mission-driven organizations, are successful only if they maintain a strong volunteer workforce. These businesses are committed to doing good things for society. They pick up the pieces where government programs leave off, and by volunteering for these organizations, you participate in helping our society meet the needs of people from all walks of life.

#### 4. Volunteering gives you a sense of purpose.

Volunteering serves to express and facilitate opportunities to carry out one's sense of purpose. The very nature of volunteering means choosing to work without being paid for it. As a result, people choose to spend their time on issues they feel strongly about. If you are greatly concerned about the treatment and well-being of animals, for example, volunteering at an animal shelter will help you address a social problem that is meaningful to you.

For more information about volunteering at Lacawac Sanctuary contact us at info@lacawac.org or call 570.689.9494 Visit our website: www.lacawac.org/volunteer.html



# Summer Camps

Conservation Leadership Academy June 23-June 28 - Ages 13-17 Residential Camp - \$150 per student

Creature Feature June 24-28 or July 1-5 Ages 5-6; 9 AM. - 2 PM; \$90 per child

Exploring Nature July 8-12 or July 29 – Aug 2 Ages 7-8; 9 AM - 4 PM; \$110 per child

Earth Expressions July 15–19; Ages 7-8,9 AM–4 PM; \$120 per child July 22–26; Ages 9–12; 9AM - 4PM; \$120 per child

Eco Investigators August 5 – 9; Ages 9-10; 9AM-4PM; \$110 per child

Wilderness Adventures Aug 12-16; Ages 11-12; 9AM-4PM; \$110 per child

For more information or to register for our summer camps, visit www.lacawac.org/summer-camps













# Thank You!

These businesses are major contributors to our K-12 environmental education programs













SCARTELLI OLSZEWSKI, P.C.





This year, mark your calendars for Friday, May 3, 2019, as we work together to make the first Friday in May the biggest day of giving in the Lackawanna County region's history through the 2019 NEPA Match Day!

NEPA Match Day was established by the Scranton Area Community Foundation in 2015 as a way to help nonprofit organizations serving our community raise awareness about their organization, engage new and existing donors, and raise much-needed capital to build organizational capacity. Promoted as a fun way to encourage philanthropy in the community, NEPA Match Day aims to demonstrate how even small gifts make a big difference.

The Scranton Area Community Foundation is providing an opportunity this year for 30 local nonprofit organizations including Lacawac to join in on the excitement while providing a dollar-for-dollar match for the first \$1,000 raised by each participating nonprofit.

To Make a donation to support our NEPA Match Day Challenge, visit our <u>website</u> at lacawac.org/nepamatchday

Or <u>Mail</u> in your donation to Lacawac Sanctuary, 94 Sanctuary Road, Lake Ariel PA 18436. Be sure to note on your donation that it is for Match Day.

# **UPCOMING 2019 LACAWAC EVENTS**

You are Invited!



# 5TH ANNUAL SUMMER SOLSTICE COCKTAIL EVENT

Thursday June 20, 2019 • 6-8 pm Wallenpaupack Brewing Company, Hawley



## UNCORKED: A NORTHERN POCONOS WINE AND SPIRITS FESTIVAL

Sunday July 21, 2019 • 3-6 pm The Cooperage, Honesdale



# 4TH ANNUAL FARM TO PLATE DINNER

Saturday August 10, 2019 • 6-9 pm The Historic Watres Lodge at Lacawac Sanctuary, Lake Ariel



# 2ND ANNUAL SCIENCE OF BREWING EVENT

Thursday September 26, 2019 • 5:30-7:30 pm The Boiler Room at the Hawley Silk Mill



## 6TH ANNUAL LAKE TO LAKE 8K TRAIL RUN AND DOG WOODS WALK

Sunday October 20, 2019 • 9:30am Lacawac Sanctuary, Lake Ariel

For more information on upcoming events visit www.lacawac.org/events

# Call for Citizen Scientists

### Help Track Water Quality of Lake Wallenpaupack

In 2018, Lacawac Sanctuary's PLEON (Pocono Lake Ecological Observatory Network) introduced a citizen science program to monitor the ecological condition of Pocono lakes. Citizen science relies on the public to gather scientific data, giving scientists access to far more data than they could collect themselves. PLEON citizen scientists collect water quality data including temperature, water clarity, water color, particulates, nutrients, and aquatic plants.

PLEON is expanding this Citizen Science program to Lake Wallenpaupack. Lake Wallenpaupack is a focal point of tourism and recreation with many communities on its shores and within its watershed. Lacawac Sanctuary contains a mile-long stretch of Wallenpaupack shore line and is within the Wallenpaupack watershed. Understanding how and why water quality in this lake may be changing is important to everyone in the region.

Why do we need citizen scientists? It's simple: Wallenpaupack is a big and weirdlyshaped lake. Water quality responds to factors like wind direction, water current, local inputs, shoreline development, water chemistry and lake organisms. These factors can vary greatly within large lakes like Wallenpaupack, leading to differences in water quality across space and time. For example, there may be an algal bloom in one area while the water in a neighboring cove remains clear. However, lake managers and scientists do not have the resources to monitor water quality in every cove. This is where citizen science can help. Working together, citizen scientists can collect data from many locations more often, capturing water quality dynamics over large spatial scales. These data can then be used to identify pristine or problem areas.

Get involved! This program works best when many people collect data from different locations on the same lake. PLEON provides a self-contained sampling kit for purchase, training in data collection, and a sampling schedule. The program is designed to be implemented from a dock or boat and is appropriate for school-age children as well as adults. This is a great program for science projects! While we are focused on Lake Wallenpaupack, we welcome sampling on any lake.

Becoming a PLEON citizen scientist is easy:

1.Become a member of Lacawac Sanctuary

2.Purchase a sampling kit and attend a training session

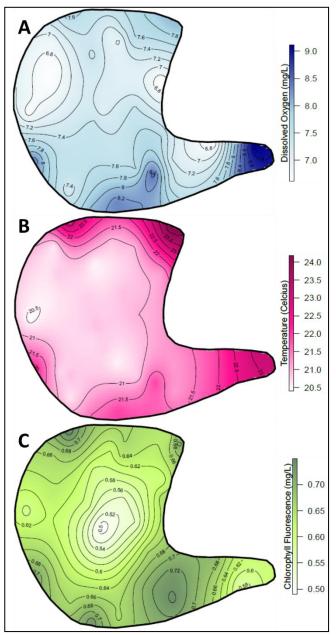
3.Go sample!

4.Return datasheets and samples to PLEON

5.Attend the Fall Citizen Science Mixer at Lacawac Sanctuary for presentation of the data

"I really enjoy the PLEON program because it helps me understand what is going on in the lakes that I test and how the things I do affect the lake. I think it is a great opportunity to learn more about your lake while helping scientists along the way. I learned a lot about not only lakes, but also about how important it is to have exact measurements."

Jesse Berman, 5th grader Manhattan PS 77, PLEON Citizen Scientist



This figure shows dissolved oxygen (A), temperature (B), and algae (measured as chlorophyll) abundance (C) in Lake Lacawac. Variability over space is shown as differences in color intensity. Lake Lacawac is a small and relatively regular in shape. Imagine the potential variability in Wallenpaupack! Data collected by Franklin & Marshall BIO 323 Ecology Class 2018

## Keep Your Eyes Out for These Signs of Research This Summer



**Bag rack:** Lake water is placed in clear ziplock bags and suspended in the lake on floating racks. Researchers can apply different treatments to these "mini lakes".



# Lacawac Sanctuary

Field Station and Environmental Education Center 94 Sanctuary Road, Lake Ariel PA 18436

Address Service Requested

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