

Centre County Pennsylvania Senior Environmental Corps June 2024 Newsletter



Volunteering for Future Generations

“Volunteering for future
Generations” RSVP
(Retired and Senior
Volunteer Program)
Centre County, PA Official
Website
(centrecountypa.gov)
Call: 814-237-0400

An affiliate of

Clearwater@clearwaterconservancy.org



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Donations may also be made through the ClearWater website. Please indicate it is for CCPaSEC. For other options see: Donations (ccpasec.org) Thank you for your generous support.

Presidents Report:

Grants and equipment are vital components of our organization. Equipment grants from governments, foundations, or corporations are crucial for equipping CCPaSEC with reagents, tools, and updated testing equipment, and can significantly improve operational capabilities, offering long-term benefits far beyond the initial investment.

Applying for grants involves a rigorous process, including proposal writing, budgeting, and demonstrating the potential impact. Successful management of grant funds is equally important, ensuring compliance with guidelines and achieving stated goals.

Gary Moorman has done an exemplary job in obtaining the recent grants. They have recently allowed Dan DeLotto to procure a new D.O. meter and two new Oakton meters. We owe Gary many thanks for his hard work.

Environmental News Pharmaceutical pollution is posing new dangers to wildlife.

6PPD-quinone <https://www.sciencedirect.com/science/article/pii/S0048969724012920>

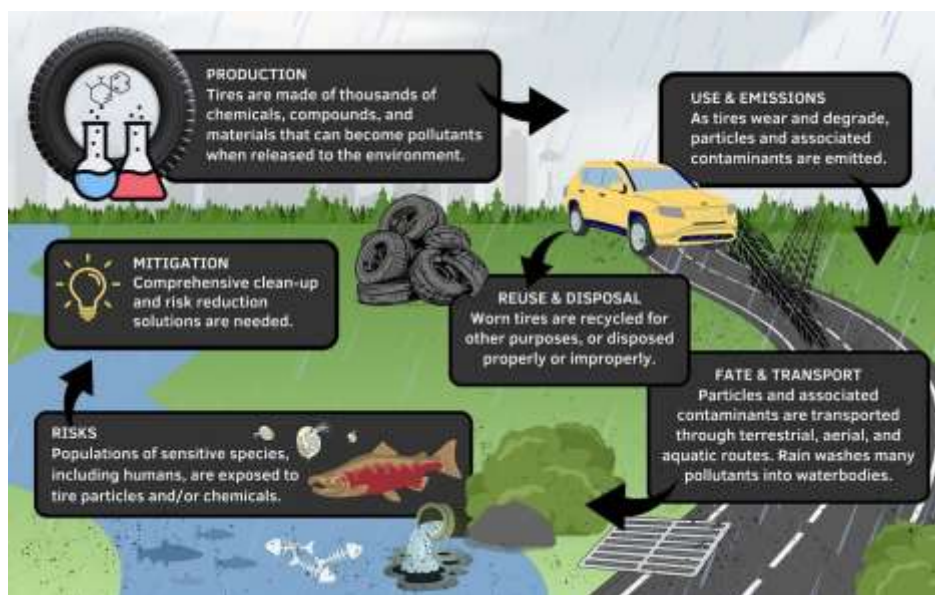
The presence of 6PPD-Q in stream water is highly toxic to certain species of fish, including Coho Salmon, Rainbow Trout, Brook Trout and White-spotted Char.

A study published in July suggests that vast quantities of tire fragments find their way into the ocean not just via rivers and waterways, but also through the air. Swept on the wind, they drifted far from where they were shed. The study warned that so many tire particles are landing in the Arctic that they pose a climate-change risk.

6PPD stands for the chemical N-(1,3-dimethylbutyl)-N'-phenyl-p-phenylenediamine. It's a chemical that prevents automotive tires from degrading and helps them last longer. When 6PPD is exposed to air, it reacts with ozone to create **6PPD-quinone** (also known as **6PPD-q**). 6PPD-quinone is lethal to coho salmon and can contaminate water systems.

6PPD is a chemical additive that protects tires from damage due to certain reactive oxygen species. 6PPD, when in contact with ozone, reacts to form the derivative 6PPD-quinone (6PPD-Q). As tires wear with time, this derivative is dispensed into the environment, travels through drainage systems when it rains and, eventually, finds its way into surface waters. Our research suggests that 6PPD-Q is not toxic to freshwater invertebrates.

<https://www.usgs.gov/centers/columbia-environmental-research-center/science/6ppd-exposure-and-effects-research-columbia>



https://ars.els-cdn.com/content/image/1-s2.0-S0048969724012920-ga1_lrg.jpg

Global Efforts Pay Off: Scientific Insights into a Key Environmental Victory

New research indicates a decline in hydrochlorofluorocarbons (HCFCs) in the atmosphere, confirming the effectiveness of the Montreal Protocol in regulating substances that harm the ozone layer and contribute to global warming.

Significant progress in reducing atmospheric concentrations of chemicals harmful to Earth's ozone layer has been revealed by a new study. It confirms the success of historic regulations limiting their production.

The findings show for the first time a notable decline in the atmospheric levels of potent ozone-depleting substances (ODS), called hydrochlorofluorocarbons (HCFCs). These HCFCs are also harmful greenhouse gases, so a reduction should

Lessen Global Warming. The study was led by the University of Bristol and published in the journal Nature Climate Change today (June 11).

Achievements Under the Montreal Protocol

<https://scitechdaily.com/global-efforts-pay-off-scientific-insights-into-a-key-environmental-victory/>

Team News



A member of our Pasec Marcellus teams has passed away

George Michael Schmidt, III, 76, of Bellefonte, passed away at home on Sunday, June 23, 2024. Born on April 10, 1948, in Baltimore, Maryland, he was the son of the late George Michael Schmidt, Jr. and Ruth (Glaeser) Schmidt.

Mike was a 1966 graduate of Towson Senior High School in Towson, Maryland. He completed his undergraduate degree at Johns Hopkins University. He went on to earn his master's degree from the University of Alaska and his Doctorate in Global Hydrologic Sciences from the University of

Florida. Prior to his retirement in 2012, he worked for the United Nations Resource in the Mediterranean Sea and Liberia, and for the NASA Weather Center.

TEAM 14 had an exceptional day in the field April 14, 2024

April 14. It was overcast but the rain held off while we surveyed the following Marcellus sites:

North Fork of Beech Creek, Clarence, Little Sandy Run at the Hatchery, Sandy Run at Kato Road and



North Fork at Pancake Road

The highlight of the day was spotting an adult Bald Eagle. We were to park our vehicle directly adjacent to the hatchery run by the Three Points Sportsman Club. As we got out of the vehicle, we spotted the eagle no more than 40 yds away sitting in a towering white pine directly above the hatchery pens.

Danielle Lanagan, Bill Leech (team leader), Bob Wilberding, Theo center

We have come upon eagles perched in this same spot several times over the years. Luckily, this one stayed long enough for me to take several photos. They are not the best quality

because of the severe bright background, but good enough to document the sighting.

Everything else that day paled in comparison.



Stream levels were normal for this time of year, slightly higher and much faster velocity. Water clarity was generally good with only slight turbidity. Ph's ranged from 6 to 6.73, DO readings were generally in the 12's and 13's.

The only difficulty we experienced was at the last site, North Fork of Beech Creek at Pancake Road, where the flow rate was too high to safely cross the stream for physical data.



Clean Up Day on Saturday, April 20th, 2024 from 12 pm- 4 pm.
Earth Day Celebration 2024 Watershed Cleanup

Pictured in the photo is Kathy Ferrigno and Dan DeLotto, following their cleanup on Upper Gyp Road in Benner Township. This area impacts Buffalo Run.

Day. This is the 3rd place photo, as selected by the ClearWater Conservancy in the Cleanup Day photo contest. Elizabeth Chrisfield (ClearWater executive director) joined Rob's team for a recent outing and would like to participate with other teams.

Outdoor Adventure Expo – June 2

We had our own table and tent this year. Dan volunteered to set this up.



Dan, Genie and Kathi manned the table at the June 2 Expo at Talleyrand Park. Betsie recently staffed a table at Family Fishing Day at Tussey Pond and PaSEC had a table at the Outdoor Expo in Bellefonte.

<https://www.statecollege.com/town-and-gown/todays-seniors-watching-over-our-waterways/>



Watching Over Our Waterways On a crisp, sunny morning in April, a small group of retirees congregated along the banks of Little Fishing Creek in Walker Township. To determine water quality in a stream, the volunteers measure the temperature and chemical makeup of the water.

They also calculate the stream's depth, width, and flow velocity, and count the various species of macro-invertebrates there.

Genie Robine

Volunteer Safety

Cell Phones: Teams are reminded to have at least one member bring along a cell phone. There are First Aid Apps for Smart Phones.

Bitten by a tick?

TickCheck can determine if your tick carries pathogens that cause Lyme and other tick-borne diseases. Our average turnaround time for test results is **42.5 hours***. Order your tests online now!

[Website: TickCheck Tick Testing - Laboratory Tick Testing Services for Lyme & Tick-Borne Diseases](#)

**Excluding weekends. In the case we receive your tick on Friday, we will resume processing it on Monday, as our lab technicians are unavailable on weekends.*



Check the weather reports and Flow

We've experienced thunderstorms and heavy rains this season. You don't have to flow measurements if the stream is too deep, or the flow is too fast to safely wade in the stream.

First Aid: We require our teams to carry a fundamental First Aid Kit with bandages and antiseptic.



Another item not often included. CURAD **QuickStop** Bleeding Control Spray, for minor cuts & scrapes or **Durvet Blood Stop Powder** (*This stuff is amazing, it stops bleeding in seconds*). Pick some up for home too.



Upcoming Events:

1. **Teams: Macros:** Team leaders who need Genie's assistance should contact her to set up dates for the spring macro count.
2. **Sierra Club:** Dave Roberts, a member of the Sierra Club, gave a presentation on PFAS contamination. PFAS is a contaminate used in firefighting foam and has been found in 78% of the streams in PA. Dave has been working with two PaSEC teams testing for PFAS in the Bald Eagle Creek and Buffalo Run. He requested that CCPaSEC include the data on a page of the web site.
3. **July 30 webinar:** The Western PA Conservancy is hosting an Invasive Species Scavenger Hunt in Aug. Participants must first watch a July 30 webinar recording which explains this scavenger hunt volunteer event and the data-reporting process. Bill will post connection information. Dave offered to obtain invasive species booklets for each PaSEC team.
4. **August 14, 2024, CCPaSEC Potluck Picnic:**
Bald Eagle State Park Marina Pavilion. CCPaSEC members and guests brief meeting at 10:30 followed by picnic.
5. **Mon, Aug 26, Mountain View Country Club** [21st annual Golf-Fest benefiting ClearWater Conservancy](#)
6. **September 17 @ 8:00 am EDT** [Bird Walks with The State College Bird Club](#)

At home activity:

- Review your team data as posted on our website.
- If you are responsible for keeping the equipment, make certain the reagents are within date and that the pH and DO meter probes are clean and ready to use.
- Calibrate the meters within 24 Hrs. of use.
- Want to know how to care for our meters and how they work? Visit our website.
- Prepare a short article for our newsletter. Tell us about your experiences, why did you join, how have you benefited from volunteering? What is your advice to new members. Have you found something of general interest to share? (We try to find articles of interest to our members). Please email me.
- We need Photos. We need team *action* photos working at a site, and a posed Team photo that have new members.

"The best way to succeed in this world is to act on the advice you give to others." Unknown

CCPaSEC is Supported by the Following Organizations

ClearWater Conservancy, the RSVP of Centre County, PA and the Centre County Conservation District are the primary sponsors for CCPaSEC and provide additional support.

PA Foundation for Watersheds granted CCPaSEC for 2024. Berkshire Hathaway granted CCPaSEC.