



CONNECTICUT SCIENCE CONNECTION

October 2019

THE CONNECTICUT BUILDING A PRESENCE FOR SCIENCE NETWORK IS SUSTAINED THROUGH THE ADVOCACY OF THE CCAT, CONNECTICUT SCIENCE SUPERVISORS ASSOCIATION, THE CONNECTICUT SCIENCE TEACHERS ASSOCIATION, AND THE CONNECTICUT ACADEMY OF SCIENCE AND ENGINEERING

State Coordinator.David Lopath lopeth@comcast.net , List Moderator..Eloise Farmer eloisef302@gmail.com

NAMES AND E-MAIL ADDRESSES OF OUR POINTS OF CONTACT AND KEY LEADERS ARE NOT SHARED WITH ANY OTHER ENTITY



Professional Development Opportunities! Are you interested in high quality, low cost, Teacher Professional Development opportunities? Visit CSTA.wildapricot.org and click on Opportunities. You will not be disappointed. Contact us if you have questions. CSTA.wildapricot.org



Join the CSSA! www.cssaonline.org All Teacher leaders welcome You do not have to be in a formal Supervisor Position, but should be interested in helping keep your colleagues informed on the latest in science education.

A FREE workshop designed exclusively for [greenleaf schools](http://greenleafschools.org) Meet other Green LEAF schools • Learn what is NEW in Green LEAF • Develop and support your school's Green Team • Evaluate your school's progress & set goals using the Green LEAF Self-Assessment tool • Share success stories and challenges • Build resources for school implementation **Tuesday, November 5, 2019 (Election Day) 9:00 am- 3:00 pm** Connecticut Forest & Park Association 16 Meriden Rd., Rockfall, CT

Green Teacher's first Fall 2019 Webinar

Join us for this interesting and timely webinar on October 16th at 7:30 pm EST. All our webinars are free of charge and open to everyone interested, but you need to register well in advance. (Use the link below). As mentioned, there is no charge for participating, and the session can be freely viewed for 30 days after the live session. Please share this with your friends.

[Empower your students by solar-powering your school](#)

with Tish Tablan, Lisa Hoyos and Joshua Barclay

Date and time: Wednesday, October 16th, 7:30 – 8:30 pm EST

Re-powering your school can be a daunting task amid bureaucrat and financial barriers. See how you can power through obstacles in this illuminating walk through various case studies of schools that have successfully implemented solar power. We'll touch on the 100% clean energy school districts campaign, how to navigate negotiations with school boards, and why re-powering your school can be so beneficial for students. [Read more and register](#)



KEYS TO SCIENTIFIC ACHIEVEMENT
CONNECTICUT SCIENCE EDUCATORS ANNUAL CONFERENCE 2019

CSTA Annual Conference November 8 & 9, 2019

Friday Night Star Party: An Evening of Astronomy

Schedule of Events	Evening Highlights	Hands-On Experiences
Registration 5:30 – 6:30	Space Exploration: Past, Present, and Future	Astronomical Phenomena
Snacks & Cash Bar 5:30 to 10:00	Celebration of Apollo 11 and 12 Moon Landings	Out of This World
Network with new and old colleagues	Late Night Movie: Apollo 13	Activities & Resources
		Star Gazing with Telescopes

REGISTRATION

ROOM RESERVATION

Make your Room Reservation Now!



School Recycling Workshop
Wednesday, October 23, 2019 CCSU

Agenda

8:30 – 9:00 **Registration & Breakfast**

9:00 – 9:15 **Welcome**

Abby Peklo, Green LEAF Schools Project Director

Tammy Thornton, Zero Waste Schools Coalition

Dr. Charles Button, CCSU Geography Department & Global Environmental Sustainability Action Coalition



9:15 – 10:15 **Morning Plenary: CT Recycling Requirements, Rewards & Challenges**

Sherill Baldwin, CT DEEP Recycling Specialist, Susan Quincy, CT DEEP Environmental Education

Sherill and Sue will help separate fact from hearsay and dissect the sometimes confusing information that schools need to know about recycling do's and don't's and clear the field of common misunderstandings so that schools can feel prepared and empowered to improve their recycling efforts.

10:15 – 10:30 **Break**

10:30 – 11:15 **Breakout Session One** *(Participants select one of four workshops of their choice.)*

11:20 – 12:05 **Breakout Session Two** *(Participants select one of four workshops of their choice)*

12:10 – 12:45 **Lunch**

12:50 – 1:35 **Breakout Session Three** *(Participants select one of four workshops of their choice)*

1:40 – 2:30 **Expert Panel: Beyond the Mandatory**

Moderator: CJ May

Panelists: Sherill Baldwin, Barbara Heineken, and Tammy Thornton

Our expert panel will offer concrete suggestions for *recycling outside the box*, fundraising options, curricular connections, and ways to access existing funds and other resources, with plenty of time for q & a.

Participants will select three of four workshops to attend. Each workshop repeats for all three breakout sessions.

On-Site Composting	Cartons for Schools	How to Conduct a Waste Audit	Zero Waste Schools
Virginia Walton Mansfield Recycling Coordinator	Barbara Heineken, Carton Council	Christine Beling, EPA	Tammy Thornton, Zero Waste Schools Coalition
Is on-site composting a good option for your school? Why or why not? Where and how?	Learn how to successfully recycle milk cartons and aseptic packaging in school cafeterias.	Learn how to conduct a food waste audit to establish your baseline and begin to plan for ways to help your school reduce food waste.	Hear what schools around CT are currently doing to reduce school waste: What works well and not so much.

The Southeastern New England Marine Educators (SENEME) will be hosting its 2019 Annual Conference on Saturday, October 9th from 8:00 am – 4:00 pm at the University of Rhode Island Narragansett Bay Campus. This event will include: a panel discussion on ocean exploration, networking opportunities, skill-building workshops, field trips, and a silent auction. All are welcome, come join us! <https://senemea.wildapricot.org/event-3233246>

NATIONAL MARINE SANCTUARIES WEBINAR SERIES

This webinar series provides formal and informal educators with educational and scientific expertise, resources, and training to support ocean and climate literacy in the classroom. Visit our [archives](#) to watch past webinar recordings.

More information on the series and upcoming webinars can be found [here](#). After registering you will receive a confirmation email containing information about joining the webinar. The Webinar ID is 462-571-163.



Sam Rhine's 2019-20 Genetic Update Conferences for High School Students and their Teachers

Plainville High School - Oct 10th

Program runs from 9:00 am to 12:30 pm / Lunch on your own Pre-registration begins Sept 1, 2019: at www.samrhine.com

- **Developing Viruses as Antibiotics**
- **CRISPR/Cas3 - the 'DNA Shredder'**
- **Chromosome Tips & Life Expectancy**
- **Producing Human Organs in the Lab**
- **3-D Printng of Human Body Parts / Human-Animal Chimeras**
 - **CRISPR Modified Pigs produce Organs for Humans Transplants**
 - **Human Brain 'Organoids' / Decellularization & Recellularization**

If you teach an AP or Honors Biology class and have not experienced a visit to Sam Rhine's presentation, I highly recommend planning attendance to this event next fall. It is well worth the trip to centrally located Plainville High School!



Teacher of the Year Award annually gives \$6,000 (\$3,000 for school use under the teacher's supervision for educational purposes and \$3,000 for personal use by the teacher) to a K-12 teacher within the United States who has demonstrated outstanding leadership in the field of geoscience education.

Your application should include material taught during the academic year ending the previous Spring or Summer semester. REQUIREMENTS & GUIDELINES: How To Apply Application open Sept. 2 to Jan. 31.

<https://foundation.aapg.org/teacher-of-the-year-award-k-12>



NSTA NEWS! A members-only community forum is now available for NSTA members! An opportunity to share ideas, express opinions, ask questions about the proposed name change. Click here to sign in and join the conversation. Not a member? join here!

SAVE THE DATES!

Connecticut Science Safety Network CSSN 2019 Workshop Calendar



Each workshop is contingent on a minimum enrollment.

All workshops instructed by internationally recognized science laboratory safety compliance specialist Dr. Ken R. Roy

❖ Cost per workshop: \$200/Person

❖ **Workshop Location:**
Connecticut Science Center
250 Columbus Blvd
Hartford, CT 06103

❖ Check-in:
Begins at 8:30AM

❖ Register online at
www.ctsciencecenter.org/education/m-andell/sciencesafetyworkshops

Workshops sponsored by CSSN in association with the:

- Connecticut Interlocal Risk Management Agency CIRMA
- Connecticut Science Center
- Connecticut Science Teachers Association
- Connecticut Science Supervisors Association
- Connecticut State Department of Education

DATE

Oct. 29,
2019
9:00AM-
12:00PM

TOPIC

Science Safety and Liability for Science Teachers and other Employees like Special Education Teachers/Paraprofessionals in the Science Lab

Under the OSHA Lab Standard, all school employees working in science labs are required to receive appropriate safety training based on the OSHA Laboratory Standard (29 CFR 1910.1450). The focus of this workshop is to address that need by providing information on legal safety standards and better professional practices.

To Register <https://formstack.io/F425F>

Nov. 12,
2019
9:00AM-
12:00PM

Training for Chemical Hygiene Officers + Chemical Management Safety 101 for 7-12 Science Teachers & Supervisors

Learn the responsibilities and liabilities of being the appointed OSHA chemical hygiene officer overseeing science laboratories and employees in your school or district.

In addition, all aspects of chemical management encompassing identification, management, and reduction of risk through all stages of chemical purchasing, storage, distribution, use, and disposal will be addressed. A must for any science teacher, supervisor or chemical hygiene officer working with or overseeing hazardous chemical use in science labs.

To Register: <https://formstack.io/D1F40>



PROFESSIONAL DEVELOPMENT WORKSHOPS

All workshops engage educators in the use of materials and provide, small group work and applications to NGSS and Common Core implementation, materials support, educator planning initiatives, and direct use in classrooms through investigations and real world explorations. Fee for each workshop is \$40.00 per educator with discounts for 2 or more educators from the same school/organization, \$35.00 or \$30.00 for three or more. **Some workshops are supported by DEEP grant funding and are offered free and can also provide a stipend for schools or educators. All workshops take place at Kellogg Environmental Center located at 500 Hawthorne Ave, Derby CT 06418, unless otherwise noted. Details found on the registration link. [Register here!](#)**

For questions and additional information please contact
susan.quincy@ct.gov or susan.d.robinson@ct.gov

Aquatic WILD Workshop

October 2, 2019

Wednesday, from 9am-2pm

Attend an Aquatic WILD workshop at the Kellogg Environmental Center in Derby. Dive into NGSS and STEM and do field investigations (weather permitting) and hands-on activities to help students learn about aquatic habitats and develop the necessary skills to prepare them for higher education, careers, in an ever-changing world. Registration Fee is \$40 per person with discounts for 2 or more educators from the same school or organization. To register, call the Kellogg Environmental Center at 203-734-2513 or email susan.d.robinson@ct.gov

Weather, Outdoors, and NGSS

October 10, 2019

Thursday, from 9am – 3pm

Special look at understanding weather and applications to NGSS for elementary grades. Using Project WET and additional resources, we will provide the science behind weather and how it differs from climate change using classroom ready simulations and lessons.

Activities are designed to help the elementary educator feel comfortable with the topic and introduce methods to integrate this into your curriculum. Focus grades K -5. This workshop is supported by DEEP grant funds. It is free and provides a \$100.00 stipend.

On the Move with Water

October 25, 2019

Friday, 9am- 3pm

Everybody loves water and the ecosystems it supports. Let's look at the dynamic system of water and its movement using State Parks as Models for student activities. See how to bring students to outdoor spaces and use the natural resources to understand water systems and the impacts we have on them. Appropriate for grades 4-10. Applications to understanding climate change on water systems and human impacts. Dress for outdoors. This workshop is supported by DEEP grant funds. It is free and provides a \$100.00 stipend.

Natural Phenomena and Matter Interactions for Physical Science

November 13, 2019

Wednesday, 10am – 3pm

Marine District Headquarters, 333 Ferry Rd., Old Lyme CT.

Using the outdoors we will explore activities to help bring the physical science of matter interactions come alive. This workshop will connect the standards for K -5 using NGSS standard PS1-A. Take a look at natural phenomena using water and plants to help awaken curiosity in students. Registration is required. This workshop is supported by DEEP grant funds and is free with a stipend for \$100.00.

Getting Little Feet WET

November 20, 2019

Wednesday, 10am – 1pm

Do you work with Preschool or provide Early Childhood Education programming? This workshop is designed just for you and your age group. Learn methods to engage the young child in exploration and skill building using water. Natural water play and hand on activities provide a learning experience that builds concepts of understanding and basic physical skills and language. Take part in this hands on workshop and receive classroom ready materials and kits. Fee for workshop is 40.00 per person, discounts for 2 or more from same location. Registration is required.

The Problem with Pollinators

December 10, 2019

Tuesday, 10am – 2pm

Let's take a look at the relationship between plants, pollinators and humans. Using a wide variety of pollinators we will take a look at how structure/function is developed and reasons for decline of many species. Materials and resources expand school gardens and habitat areas using more curriculum connections. Registration is required. Fee for the workshop is 40.00 and provides you with a collection of lessons and resources. Free for Green LEAF Schools.

Workshops may also be arranged for school or district professional development days. Call Kellogg Environmental Education Center, 203-734-2513 to discuss your school or district needs. We would be happy to tailor make a workshop for your educators. There may be a fee to cover cost of materials that is flexible, based on your goals and resource supplies.



**CT DEEP State Parks
Public Outreach
Kellogg Environmental Center
500 Hawthorne Ave
Derby, CT 06418
203-734-2513
Susan.quincy@ct.gov**



What Is Science Matters? Science Matters is an initiative by the National Science Teachers Association (NSTA) to bring content, news, and information that supports quality science education to parents and teachers nationwide. Science Matters builds on the success of the Building a Presence for Science program, first launched in 1997 as an e-networking initiative to assist teachers of science with professional development opportunities. Building a Presence for Science—now Science Matters—reaches readers in 34 states and the District of Columbia. Why does Science Matter? Science is critical to understanding the world around us. Most Americans feel that they received a good education and that their children will as well. Unfortunately, not many are aware that international tests show that American students are simply not performing well in science when compared to students in other countries. Many students (and their parents!) believe that science is irrelevant to their lives. Innovation leads to new products and processes that sustain our economy, and this innovation depends on a solid knowledge base in science, math, and engineering. All jobs of the future will require a basic understanding of math and science. The most recent ten year employment projections by the U.S. Labor Department show that of the 20 fastest growing occupations projected for 2014, 15 of them require significant mathematics or science preparation to successfully compete for a job. This is why Science Matters. Quality learning experiences in the sciences—starting at an early age—are critical to science literacy and our future workforce. Feel free to publish this information in school newsletters and bulletins, and share it with other parents, teachers, and administrators.