

Science Day 2024

Speakers

April 12, 2024 - HVRHS - Room 133

7:50-8:50

Kyle Testerman - Wildlife Specialist - DEEP



Kyle is a wildlife biologist. He works primarily with furbearers and black bears now but has worked on bird and bat projects here in CT and for a couple seasons in Alaska. Kyle has an MS from CCSU and BS from UConn.

Talk Description:

Kyle will share his background, wildlife experiences and expertise on fur bearing animals - fishers, bears and more.

8:54-9:42

Alison Robey - PhD Candidate - Yale University - Environmental Science and Climate Change



Alison is a third-year PhD candidate in Ecology & Evolutionary Biology at Yale University, where she studies ecological theory and how modeling can be used to effectively predict and address threats to different ecosystems. She also works as a freelance writer in science communication, currently by writing monthly science newsletters for the Kent Land Trust. Alison grew up in Kent, CT and graduated from Williams College in 2020 with a BA in Environmental Studies and Mathematics.

Talk description: One of the most pressing goals of ecology today is accurately predicting and effectively managing the impacts of changing temperatures on populations of plants and

animals. Alison will talk about how ecologists use tools from mathematics, computer science, and environmental studies to create models that help us predict and manage these risks, then present some of her own results showing how we can use our knowledge about organism physiology and population dynamics to predict how heat waves affect extinction risks.

9:46-10:34

Dr. Charles Canham - Cary Institute -Ecology and Management of Temperate Forests



Dr. Charles Canham is a Senior Scientist, Emeritus at the Cary Institute of Ecosystem Studies, where he has been on the scientific staff since 1984. He has a PhD in Ecology and Evolutionary Biology from Cornell University, and Bachelors and Masters degrees in Botany from Montana State University and the University of Wisconsin-Madison, respectively. His primary research interests have focused on the ecology and management of temperate forests, particularly in the Northeastern U.S., including over 20 years of research at Great Mountain Forest in Norfolk, CT. He is the author of over 140 scientific articles, and the book *Forests Adrift: Currents Shaping the Future of Northeastern Trees*.

Talk description:

“Drawing from his recent book *Forests Adrift*, Charles Canham will sketch both the ecological legacies and modern currents that will shape the future of eastern forests. It is not possible to understand where our forests are headed without accounting for the legacies of centuries of changes in land use and forest management. And while the impacts of climate change rightly dominate headlines, the effects on eastern forests will take place in the context of the many other currents that will determine the future distribution and abundance of eastern tree species. Those include both the intrinsic process of forest succession, and many human threats, including air pollution, invasive species, and the ever-expanding list of introduced forest pests and pathogens.”

10:38-11:07 Flex Block - No speakers

11:11-12:11

Wendy Miller - Sharon Audubon Birds of Prey



Originally from Quarryville, Pennsylvania, Wendy joined the Sharon Audubon Center staff in September 1997 as an Environmental Education intern and has been there ever since in various roles such as Wildlife Rehabilitation and Outreach Coordinator, EE Specialist, and even Interim Center Director. She began her current role as Education Program Manager in July 2008, and oversees all of SAC’s education programming

and the Monarch butterfly rearing project, teaches school programs on and off-site, hires and trains seasonal education staff, and is the Director of Summer Camp. She has a B.S. in Wildlife and Fisheries Science from Pennsylvania State University.

Talk description:

Live Birds of Prey Program

Various species of live birds of prey will accompany Sharon Audubon Center Staff to demonstrate their beauty, power and connection with the natural world. Participants will learn about the amazing adaptations of these impressive birds and will understand why raptors and their environment should continue to be protected and respected. All of the resident education birds are non-releasable due to human interference and are ambassadors of their species, traveling with SAC staff to educate people about the importance of these predators.

Lunch 12:11-12:41 Teachers, speakers and MG lunches in room 133 (catered by Freund's)

12:45-1:33

Brian Saccardi - University of Illinois - Environmental Scientist



As an environmental scientist, Brian studies the critical zone, or the surface of the earth encompassing from the forest canopy to the groundwater and everything in between. Most of his current research focuses on carbon cycling and the processes that transport it through our soils and streams. Brian started down the path to become an environmental scientist in high school when he joined a club called Envirothon. I then studied at UConn, the University of New Hampshire, and UMass, where he eventually got his PhD in Geoscience. Along the way, he worked for several environmental organizations, including Great Mountain Forest, HVA, and Sessions Woods Wildlife Management Area.

Talk Description:

Brian will give a presentation that starts with what it is like to be a researcher in environmental science and then proceed into his own research. The research he will talk about will focus on stream carbon and how his research team developed reactive transport models to predict how climate change will affect the carbon cycle.

1:37-2:25

Emily Peters - Engineer - Pratt and Whitney



Emily Peters is a test engineer at Pratt & Whitney in East Hartford CT. As a student at Penn State, she developed an interest in test engineering while building remote control model aircraft. She graduated with an aerospace engineering degree in 2019 and has been working in engine development tests ever since covering ground and flight tests on military and commercial programs. Her favorite projects have been the most destructive tests purposefully ingesting birds, ice and fan blade liberation for FAA certification.

Talk Description:

Emily will discuss her job from two different perspectives. First she will present what inspired her to go into engineering and the various paths one can choose. The World of Engineering calls all curious minds to learn about the variety of engineering disciplines and roles that drive change and inspire a better tomorrow. Second, Emily will describe her role as a test engineer. She describes it as MythBusters at work where one learns how to use the scientific method and validate designs of new products! Development test engineering at Pratt & Whitney conducts many certification tests to approve engines for flight. These tests verify the products are safe and reliable for the flying public.