

Lecture 1: Birds, Big Data, and Citizen Science: Understanding the Impacts of Global Change

Featured Speaker: Allen Hurlbert, Ph.D.; Professor of Biology; University of North Carolina at Chapel Hill

Bio:

Dr. Allen Hurlbert is an accomplished ecologist and academic leader with extensive experience in studying ecological communities and the processes that shape their diversity and composition. Dr. Hurlbert earned his Ph.D. in Biology from the University of New Mexico in 2005, and he currently serves as the Director of Graduate Studies for the Environment, Ecology, & Energy Program at the University of North Carolina at Chapel Hill, where he has made significant contributions to research and teaching.

Dr. Hurlbert's expertise in ecological research is recognized internationally, and he has been a member of the Highlands Biological Station's Board of Scientific Advisors since 2016. In his lab, he and his team investigate the structure and dynamics of ecological communities, using a range of approaches from manipulative experiments to modeling and working with global-scale datasets. Their research encompasses both vertebrate and invertebrate species as well as plant communities and aims to understand the factors that determine patterns of diversity, composition, turnover, and relative abundance.

Dr. Hurlbert created Caterpillars Count! - a citizen science project for measuring the seasonal variation and abundance of arthropods like caterpillars, beetles, and spiders found on the foliage of trees and shrubs. His work has been published in numerous high-profile journals and he is frequently invited to speak at conferences and symposia around the world. He is also an active mentor to graduate students and postdoctoral researchers and has supervised many successful research projects. In his free time, he enjoys ultimate frisbee, coaching his 9-year-old's soccer team, and submitting nature observations to eBird and iNaturalist.

Lecture 2: Native Plants for the Vegetable Garden

Featured Speaker: Adam Bigelow; Plant Nerd and Guide; Bigelow's Botanical Excursions

Bio:

Adam Bigelow is a horticulturist and amateur botanist who lives in Cullowhee, NC, and has been studying the plants and wildflowers of Southern Appalachia for over 20 years. Adam is the owner/operator of Bigelow's Botanical Excursions, an eco-tour business leading guided plant walks in WNC. He is an avid organic gardener and founded and managed the Cullowhee Community Garden for ten years. Adam is a member of the planning committee for the Cullowhee Native Plant Conference and has attended the conference for many years.

Lecture 3: Microplastic Pollution in Marine and Freshwater Ecosystems

Featured Speaker: Austin D. Gray, Ph.D.; Assistant Professor of Biological Sciences; Virginia Tech

Bio:

Austin Gray hails from Charleston, SC, where he attended The Citadel, Military College of South Carolina for his undergraduate and graduate degree. He then attended the University of North Carolina at Greensboro for his Ph.D., becoming the first Black American to receive a doctorate in environmental health sciences. Currently, Gray is an assistant professor at Virginia Tech. Gray's research priorities are focused on addressing questions related to environmental toxicology, primarily using physiological and ecological approaches to examine the impacts of legacy and emerging contaminants (PAHs, POPs, microplastics, nanoplastics, and pharmaceuticals) from anthropogenic influence and assessing their risk to a variety of freshwater and marine organisms. Since becoming a graduate student, Gray has served in various leadership roles within SETAC North America (SNA). He served as Chair of the North American Student Advisory Council (NASAC), chair of the Career Development Committee (SNA CDC), and currently serves on the SETAC North America Board of Directors. Dr. Gray co-founded the SNA Inclusive Diversity Committee (SNA IDC).

Lecture 4: The Geology That Has Shaped the Highlands-Cashiers Plateau

Featured Speaker: Bill Jacobs, Geology Enthusiast and Author of *Whence These Special Places – The Geology of Cashiers, Highlands & Panthertown Valley*

Bio:

Bill Jacobs is a graduate of Swarthmore College and Duke Law School. After retiring from his Atlanta-based legal career in 2011, he pursued his curiosity about the extraordinary landscapes of the Eastern Blue Ridge, particularly the Highlands-Cashiers Plateau and surrounding areas. His curiosity led through a wide array of online and in-person courses, and of academic, professional, and popular books and papers – as well as lots of feet-on-the-ground fieldwork, at times in challenging terrain. Eventually, it led to writing “Whence These Special Places?”, which focuses on how geologic history has shaped not just the overall landscape, but also our individual mountains, waterfalls, and other natural features. Bill lives in Asheville with his wife Susan, a dog, and two cats, but spends most of the summer in Cashiers. Either place, if he’s not geologizing or hiking with the dog (or both), he’s often found on his bicycle.

You can find more information about Bill and his book at www.GreatRockPress.com.

Lecture 5: History of National Forest Management in the Chattooga River Watershed, and the Compelling Case for a New Mission for the Forest Service

Featured Speaker: Buzz Williams; Program Specialist & Emeritus Executive Director, Chattooga Conservancy

Bio:

Buzz Williams is a renowned environmental conservationist and outdoor enthusiast with extensive experience in forest management, outdoor recreation, and environmental advocacy. Born on July 13, 1950, in Pendleton, SC, Williams has spent much of his life pursuing his passion for the outdoors and protecting the environment.

Williams earned a Bachelor of Science degree in Forest Management from Clemson University in 1977, and continued his education through various continuing education programs at Colorado State University, Midwest Academy, and the University of Georgia (Athens). He began his career as an outfitter and guide for whitewater rafting, canoeing, and cross-country skiing, and later became a log cabin and timber frame builder.

In 1987, Williams joined the USDA Forest Service as a River Ranger, working in the Andrew Pickens District of the Sumter National Forest until 1990. He then transitioned to the Association of Forest Service Employees for Environmental Ethics (AFSEEE), where he served as the Southeast Program Coordinator, Acting Executive Director, and Legislative Liaison.

In 1994, Williams became the Executive Director of the Chattooga Conservancy, where he continued his conservation work before transitioning to the role of Program Specialist in 2013, where he still serves today. Throughout his career, Williams has received numerous awards for his outstanding contributions to environmental conservation, including recognition as Forest Conservationist of the Year by Georgia Wildlife Federation in 1995, and more recently in 2021, he was inducted into the Southern Appalachian Whitewater Hall of Fame.

Lecture 6: Bird Talk: An Exploration of Avian Communication

Featured Speaker: Barbara Ballentine, Ph.D.; Associate Professor; Western Carolina University

Bio:

Barbara Ballentine is an evolutionary biologist with a particular focus on the mechanisms that drive phenotypic variation and population divergence in animals, especially birds. She is interested in the interplay of sexual selection and natural selection, and how these evolutionary forces influence the expression of mating signals and other phenotypic traits.

Ballentine earned a Bachelor of Science degree from the University of North Carolina at Chapel Hill in 1997, and went on to earn a Master of Science degree from Auburn University in 2000. She then pursued her PhD in Evolutionary Biology at Duke University, which she completed in 2006.

In her research, Ballentine employs a range of integrative and experimental approaches, both in the field and laboratory, to study the mechanisms of phenotypic variation in birds. She is particularly interested in how sexual selection favors reliable mating signals, and how natural selection constrains their expression. Her work also explores the mechanisms underlying morphological and behavioral variation between different populations of birds.

In addition to her research, Ballentine is also a co-author of the book *Bird Talk: An Exploration of Avian Communication*. This book offers a fascinating look at the diverse and complex ways that birds communicate with one another, including through vocalizations, body language, and other forms of signaling. The book draws on insights from evolutionary biology, neuroscience, and ecology to provide a comprehensive and accessible overview of avian communication, and its importance for the survival and reproductive success of different bird species.

Lecture 7: Sounds Wild and Broken

Featured Speaker: David George Haskell, Ph.D.; Author and William R. Kenan Jr. Professor;
University of the South

Bio:

David George Haskell is a writer and biologist known for his close observation of the living world. He is a William R. Kenan Jr. Professor at The University of the South, a Fellow of the Linnean Society of London, and a Guggenheim Fellow. His books include *The Forest Unseen*, which was a finalist for the Pulitzer Prize and the PEN/E.O. Wilson Literary Science Writing Award, winner of National Academies' Best Book Award, Reed Environmental Writing Award, and National Outdoor Book Award for Natural History Literature; *The Songs of Trees*, winner of the John Burroughs Medal for distinguished natural history writing and the Iris Book Award; and *Sounds Wild and Broken: Sonic Marvels, Evolution's Creativity*, and the Crisis of Sensory Extinction, an Editor's Choice at *The New York Times* and finalist for the PEN/E.O. Wilson Literary Science Writing Award. Find him at dghaskell.com

Lecture 8: Archaeoastronomy in Southwestern North Carolina

Featured Speaker(s): Jane M. Eastman, Ph.D.; Associate Professor; Anthropology and Sociology Department; Western Carolina University

& Brett Riggs, Ph.D.; Sequoyah Distinguished Professor of Cherokee Studies; Western Carolina University

Eastman Bio:

Jane Eastman is an associate professor in the Department of Anthropology and Sociology and director of the Tali Tsisgwayahi Archaeological Collections Facility at Western Carolina University. She has been on faculty at WCU since 2001. Her doctoral work focused on the Sara, a Siouan-speaking group from the northern Piedmont, who became affiliated with the Catawba by the 18th -century. Eastman's dissertation focused on cultural adaptations the Sara made while navigating the challenges and opportunities of European contact. Since moving to the western part of the state, she has become involved in Cherokee archaeology and culture and language revitalization; and served as the Director of WCU's Cherokee Studies Program for 14 years. Most recently, Eastman has been involved in testing and data recovery of Cherokee ancestral sites on Western Carolina University's campus and remote sensing at several former Cherokee town and mound sites. She has become very interested in landscape archaeology, especially the sacred aspects of landscapes and cosmology. Eastman is applying that interest to exploring western North Carolina as a Cherokee sacred landscape, and teaching about cosmologies around the world.

Riggs Bio:

Brett Riggs (B.A., Wake Forest University; M.A. and Ph.D., University of Tennessee) is Sequoyah Distinguished Professor of Cherokee Studies at Western Carolina University. Prior to joining Western Carolina University, Riggs was a research archaeologist and assistant professor in the Research Laboratories of Archaeology at the University of North Carolina, and previously served as deputy Tribal Historic Preservation Officer and archaeologist for the Eastern Band of Cherokee Indians. Riggs specializes in the archaeology and ethnohistory of the Cherokee and Catawba peoples. His studies of Removal-era Cherokee archaeology and documentary sources have guided the expansion of the NPS Trail of Tears National Historic Trail in North Carolina and Tennessee.

Lecture 9: South Carolina's Mountain Bridge Wilderness Area

Featured Speaker: Tim Lee; Interpretive Ranger/Naturalist; Mountain Bridge Wilderness Area

Bio:

A native South Carolinian, Tim has studied and taught as a naturalist and biologist throughout the southeast for more than 30 years. For the past 22 years, he has been the Interpretive Ranger/Naturalist for South Carolina State Park Service's Mountain Bridge Wilderness Area where he conducts research and provides educational programs for children and adults. He is the South Carolina Park Services coordinator with the South Carolina Master Naturalist Program and is an Educational Leadership Partner for the South Carolina Aquarium. Tim is a member of the National Association of Interpreters and an honorary SC Statewide Master Naturalist.