



2023 EASTERN OLD-GROWTH FOREST CONFERENCE

Conference Presenters

Mark Anderson

Mark Anderson is Director of Conservation Science at The Nature Conservancy. He provides science leadership, ecological analysis, and landscape assessments for conservation efforts across 22 states in the Eastern United States. He holds a Ph.D. in Ecology from University of New Hampshire and has worked as an ecologist for over 30 years – 27 with The Nature Conservancy. He has published widely on climate change resilience, large landscape conservation, biodiversity, and forest dynamics. A co-author of the National Vegetation Classification, his current research interests focus on the intersection between ecological services, biodiversity, and geophysical properties. He manages a team of six scientists specializing in landscape ecology, aquatic and terrestrial connectivity, marine spatial planning, and regional data management. In 2017, Mark received TNC’s Conservation Achievement Award for his work to identify climate resilient “strongholds” – areas where complex topographies, elevations and geologies allow them to withstand climate impacts and continue supporting people and nature. Mark and his team have created a comprehensive map of these strongholds across the continental United States which is being used by TNC, government agencies and other conservation organizations to prioritize the most important lands and waters to protect in order to sustain the diversity of life on Earth.

Semura Aytur

Semra Aytur, PhD, MPH is a Professor in the Department of Health Policy and Management at the University of New Hampshire. Dr. Aytur is an Epidemiologist whose research focuses on community resilience and the relationships between the built, social, and natural environment in keeping people well. Dr. Aytur earned a PhD in Epidemiology from the University of North Carolina (UNC) Chapel Hill followed by a postdoctoral fellowship in cardiovascular epidemiology. She also has a Master’s in Public Health (MPH) from Boston University. She has published over 60 scientific journal articles. Dr. Aytur serves as the Climate Justice Co-Chair for New Hampshire Healthcare Workers for Climate Action (NH HWCA). In 2022, Dr. Aytur received the Climate and Health Leadership Award from the American Public Health Association (APHA) Center for Climate, Health, and Equity. She was also a recipient of the Betty J. Cleckley Minority Issues Research Award (2019) which recognizes individuals in public health research who have made significant contributions to research affecting people who are members of historically marginalized groups.

She is deeply committed to collaborative learning and research that supports innovative ways to improve health behavior and planetary health.

Andrew Barton

Raised in the southern Appalachians, Andrew Barton is a forest and fire ecologist, science writer, and professor of biology. His research focuses on forest response to changing climate and wildfire in the mountains of the Southwest. His current projects focus on an endangered plant, fire management in national parks, and the use of the new ECOSTRESS instrument on the International Space Station to predict vegetation recovery after wildfires. Drew is the author of the award-winning book, *The Changing Nature of the Maine Woods*, and *Ecology and Recovery of Old-growth Forests in Eastern North America*. He co-founded the Michigan National Forest Watch and the UMF Sustainable Campus Coalition and was a board member of the Mt. Blue-Tumbledown Conservation Alliance, which protected 30,000 acres of forestland in western Maine. He teaches courses on ecology, conservation, and forests, as well as a travel course on the ecology of Costa Rica.

Jaci Braund

Jaci Braund is an Ecologist with the Pennsylvania Natural Heritage Program located in Harrisburg, PA. Her ecology work primarily revolves around classifying plant communities within Pennsylvania, the occasional rare plant survey, and recently expanded to investigating old growth forests in 2021.

Paul Catanzaro

Paul Catanzaro is Associate Professor & State Extension Forester, University of Massachusetts. As extension faculty, Paul's work integrates research and outreach to family forest owners. The goal of this integrated approach is to learn about family forest owners in order to better inform their decisions. His courses are heavily influenced by my extension experience, professional relationships, and applied research. Paul has authored several publications related to Old Growth forests and carbon, including the recent *Restoring Old-Growth Characteristics to New England's and New York's Forests* (2022), co-authored with Anthony D'Amato.

Charlie Cogbill

Dr. Charles Cogbill is a historical ecologist based in Plainfield, Vermont and an Associate of Harvard Forest. Since the 1970s, he has studied the effect of acid rain on red spruce, in particular working with the Hubbard Brook Ecosystem Study and the Spruce Response Program on Mount Moosilauke. He has active research interests in old-growth forests and their ecology, dynamics of montane forests of the Appalachians, and the alpine vegetation of eastern North America. Most recently he has been involved in archival research reconstructing the composition, structure, and dynamics of pre-settlement forests of northeastern North America. Together with the PALEON project he has developed a map of the forests of the United States before Euro-American settlement.

Mitch Epstein

Mitch Epstein has photographed the landscape and psyche of America for half a century. A pioneer of 1970s color photography, Epstein has been inducted into the National Academy of Design and awarded the Prix Pictet, Berlin Prize, and a Guggenheim Fellowship. His work has been shown and collected by museums worldwide, including the Tate Modern in London and New York's Museum of Modern Art and The Whitney Museum of American Art; a theatrical rendition of Epstein's American Power series was commissioned and premiered by the Walker Art Center. His books include *Silver and Chrome*, *Property Rights*, *New York Arbor*, *American Power*, and *Recreation*, all published by Steidl. Epstein has also worked in film as director of *Dad*, and production designer and co-producer for *Salaam Bombay!* (1988) and *Mississippi Masala* (1991). He lives in New York City.

Susanna Fletcher

Suzanna Fletcher is the Chief of Clinical Practices and a forest therapy guide for BirchWalking, a social impact organization that provides environments for people to awaken and deepen connections with nature beings for the benefit of both. These connections may promote relaxation, deeper self-awareness, creativity, flexibility, closer connections with others and nature beings, and many other positive effects. She resides and works in North Carolina and in New Hampshire. Suzanna has a Bachelor's Degree in Psychology from the Wheaton College. She has a Master's of Education Degree from the University of New Hampshire. She also has a Master's of Science degree in Psychology and a Doctorate in Psychology from Antioch University New England. She is a member of the American Psychological Association.

David Foster

David Foster is an ecologist, Director Emeritus of the Harvard Forest, and President Emeritus of the Highstead Foundation. His commitment to the integration of forest and farmland conservation with resilient community development led to the founding of the Wildlands, Woodlands, Farmlands & Communities initiative in 2010 and the publication of *Wildlands in New England—Past, Present, and Future* in 2023. David's early research centered on wilderness dynamics in Labrador with comparative studies in Sweden and Norway. In New England, his work is informed by studies in Harvard's old-growth Pisgah Forest, which continues to yield insights 85 years after it was levelled by the 1938 hurricane. David has written and edited books including *Thoreau's Country: Journey Through a Transformed Landscape*; *Forests in Time: The Environmental Consequences of 1000 Years of Change in New England*; *Hemlock: A Forest Giant on the Edge*; and *A Meeting of Land and Sea: The Nature and Future of Martha's Vineyard*.

Shawn Fraver

Shawn Fraver is an Associate Professor of Forest Ecology at the University of Maine. He has worked in old-growth forests in New England, Minnesota, Sweden, central Europe, and Chile. The topic of

old-growth forests combines his interests in dendrochronology, forest dynamics, forest structure, and biodiversity.

Lee Frelich

Lee E. Frelich is Director of the University of Minnesota Center for Forest Ecology. He received a Ph.D. in Forest Ecology from the University of Wisconsin-Madison in 1986. Frelich has authored 210 publications with 332 coauthors from 26 countries, including major works for *Cambridge University Press* and *Oxford University Press*. He is listed among the top 1% of all scientists in the world in the Ecology and Environment category by the *Web of Science*. His research has been featured in the news media 500 times, including such venues as *The New York Times*, *Newsweek* and *Washington Post*. Frelich has provided consulting services on forest management for the U.S. Army, Air Force, National Forest Service, and National Park Service. Current research interests include large-scale fire and wind, earthworm invasion, and climate change in temperate and boreal forests.

Bob Friedlander

As a hematologist-oncologist and subsequently a palliative care physician, Bob focused his clinical and research roles on the human connections between patients, family members and physicians. In his volunteer life, his long-standing interest in active listening, personal narratives, community organizing and working with diverse populations led to the founding of Innisfree Cancer Help of NH, an interdisciplinary supportive care program, and Healthcare Voices of NH, a grassroots, independent and non-partisan COVID-19 vaccine trust-building campaign. It was in this spirit that he founded NH Healthcare Workers for Climate Action. Bob hopes to leverage the 'trusted-messenger status' of healthcare workers on the impact of climate on health to enhance awareness, knowledge and direct action in support of climate solutions. Bob is a graduate of Phillips Exeter Academy, Yale College, and Weill Cornell Medicine. Bob founded NH HWCA in the summer of 2021 and served as Board Chair for the first year.

Max Henschel

Max Henschel is an Ecologist with the New York Natural Heritage Program, where he coordinates the Program's State Lands Assessment project and the Old-growth and Carbon project. In his capacity as an Ecologist, Max primarily works in the New York State Forest Preserve, surveying and delineating natural communities, with emphasis on identifying old-growth forests and exemplary natural communities. He has a Master of Science degree from Michigan Technological University and a Doctorate in Wildlife Ecology from the University of Wisconsin-Madison.

Jon Leibowitz, Executive Director of Northeast Wilderness Trust

Jon Leibowitz is Executive Director of Northeast Wilderness Trust. Jon has worked in the private land conservation field since graduating from Vermont Law School in 2011. Before joining Northeast Wilderness Trust, he was the Executive Director of Montezuma Land Conservancy in Colorado. Jon

serves on the Rewilding Leadership Council, the Steering Committee of Wildlands & Woodlands, and is a co-owner of WildEdge Brewing Collective. He lives in Middlesex, Vermont, where he serves on the Planning Commission. He enjoys wandering the woods behind his house and maintaining a questionable obsession with house plants.

Alexandra Kosiba

Alexandra is a forest ecologist and tree physiologist who specializes in understanding tree response to climate and other environmental change. As Extension Assistant Professor of Forestry, she creates resources and conducts applied research to help landowners, foresters, and decision-makers better understand the impacts of climate change and other stressors on Vermont's forests and management techniques to improve forest resilience. Ali received her PhD and MS degrees in Natural Resources (Forest Science) from the Rubinstein School of Environment and Natural Resources at UVM. Following her graduate studies, she worked as staff scientist and Project Manager for FEMC where she oversaw and analyzed data for regional and state projects, as well as co-managed the Forest Health Monitoring program, and then as the Climate Forester for the State of Vermont, Department of Forests, Parks, and Recreation.

Bob Leverett

Bob Leverett is co-founder of the Native Tree Society, co-founder and President of Friends of Mohawk Trail State Forest, Chair of the Massachusetts Department of Conservation and Recreation Forest Reserves Science Advisory Committee, and co-author of the *American Forests Champion Tree-Measuring Guidelines Handbook*. Educated as an engineer, Bob is a recognized expert in the discipline of measuring trees for both science and sport. Currently, he is working with climate scientists to help measure carbon sequestration in individual trees. Co-author of several books, including the *Sierra Club Guide to Ancient Forests of the Northeast*, he has been the central figure in the Ancient Eastern Forests Conference Series. A co-discoverer of most of the known old growth in Massachusetts, his association with old-growth forest confirmations dates to the middle 1980s.

Joan Maloof

Joan Maloof has visited well over a hundred old-growth forests across the US from north to south and east to west, including Hawaii and Alaska. Many of these forests are now recognized in the Old-Growth Forest Network, an organization she created to preserve the remaining old growth and to ensure that there is at least one never-logged open-to-the-public forest in every county where forests naturally grow. Building both the Network and the organization has given Maloof a unique platform to see the obstacles to forests preservation, and also the opportunities for where her voice, speaking for the forests, can make a difference. Maloof is a PhD ecologist and a professor emeritus at Salisbury University, in Maryland. She is the author of five books about trees and forests. Her most recent, released in April of this year, is *Nature's Temples: A Natural History of Old-Growth Forests*.

Gibran Mancus

Gibran Mancus, PhD, RN, has 13 years of experience as a nurse, researcher, and educator with nonprofits and public sector agencies involved in Global, Environmental and Occupational Health (“Geohealth”). Dr. Mancus’ work focuses on furthering the understanding how factors of the built and social environment influence human health and the development of environmental remediation and therapy programming. Guided by a planetary health framework, Gibran utilizes mixed methods to explore individual and community factors of health in the places where people work, live and play.

Susan Masino

Dr. Susan A. Masino is the Vernon D. Roosa Professor of Applied Science at Trinity College in Hartford, CT. Her research focuses on promoting and restoring brain health, with a particular interest in the relationship among metabolism, brain activity and behavior. In addition to her laboratory research Dr. Masino is interested in how environmental policies can improve brain health – with a special focus on New England’s amazing forests – and is involved in local educational and environmental issues. During 2018-2019 she was a Charles Bullard Fellow in Forest Research at Harvard.

Caitlin Mather

Caitlin Mather is Land Protection Manager at Northeast Wilderness Trust. Among her duties, Caitlin manages the Wildlands Partnership Program, and other options for forever-wild conservation. She comes to Northeast Wilderness Trust with a background in a wide range of land conservation transactions while working as a Paralegal at the Vermont Land Trust. Outside the office Caitlin can be found in her garden, swimming in the Northeast’s many lakes, cooking up delights in her kitchen and honing her skills as a backyard naturalist.

Nadine Mazzola

Nadine Mazzola is the multi award-winning author of the book “Forest Bathing with Your Dog”, and a speaker, educator and experienced Certified Forest Therapy Guide and Somatics Educator. Her consulting and workshops focus the application of Nature and Forest Therapy for benefiting people of different populations. Nadine is a senior-trainer for the Association of Nature and Forest Therapy (ANFT) and has trained hundreds of forest therapy guides around the world. Previously a member of the ANFT leadership team, she is now an Advisor to ANFT, and consults with them on research projects, strategic planning, training methods and curriculum design. During her tenure with ANFT Nadine consulted on the design of multiple research projects studying the practice of Relational Forest Therapy and its effects on various aspects of psychological, spiritual and physiological human health and the health of forests. She is currently in the process of designing a research project on The Effects of Forest Therapy on Loneliness partnering with Courtney L. Schultz, Executive Director of Health and Technology Partners.

Bill McKibben

His 1989 book *The End of Nature* is regarded as the first book for a general audience about climate change, and has appeared in 24 languages. He's gone on to write 20 books, and his work appears regularly in periodicals from the *New Yorker* to *Rolling Stone*. He serves as the Schumann Distinguished Scholar in Environmental Studies at Middlebury College, as a fellow of the American Academy of Arts and Sciences, and he has won the Gandhi Peace Prize as well as honorary degrees from 20 colleges and universities. He was awarded the Right Livelihood Award, sometimes called the alternative Nobel, in the Swedish Parliament. *Foreign Policy* named him to its inaugural list of the world's 100 most important global thinkers. McKibben helped found 350.org, the first global grassroots climate campaign, which has organized protests on every continent, including Antarctica, for climate action. He played a leading role in launching the opposition to big oil pipeline projects like Keystone XL, and the fossil fuel divestment campaign, which has become the biggest anti-corporate campaign in history, with endowments worth more than \$40 trillion stepping back from oil, gas and coal. He lives in the mountains above Lake Champlain with his wife, the writer Sue Halpern, where he spends as much time as possible outdoors. In 2014, biologists credited his career by naming a new species of woodland gnat—*Megophthalmidia mckibbeni*—in his honor.

Bill Nichols

BILL NICHOLS is the Senior Ecologist and State Botanist with the New Hampshire Natural Heritage Bureau, where he has worked since 1996. He conducts natural area inventories and research on rare plants and natural communities throughout New Hampshire, and coordinates revisions to the state's endangered and threatened plant list. Prior to this position, he worked for six years with the Massachusetts Audubon Society and the Audubon Society of Rhode Island as a Plant Community Ecologist, Plant Inventory Specialist, and Refuge Manager. Bill has also taught and lectured on astronomy, starlore, and the night sky. Earlier in his career, he worked over 15 years as a master wooden boat builder at Lowell's Boat Shop in Massachusetts. Bill has a Master of Science Degree in Botany from the University of Rhode Island and a Bachelor of Science Degree in Marine Biology from the University of New England in Maine. His master's thesis research focused on the degree to which geomorphological factors can be used to predict vascular plant diversity.

Dave Orwig

Dave Orwig is a Senior Forest Ecologist at Harvard Forest, MA. His research interests encompass various aspects of forest ecology and ecosystem science, with particular emphasis on dendroecology and the role of land use history and disturbance on forest composition and structure. His doctoral dissertation focused on the responses of co-occurring tree species to various disturbances and included studies of radial growth, ecophysiology, canopy recruitment, and successional dynamics of oak-pine forests in Virginia. Dave has examined the composition, structure, and radial growth dynamics in many old-growth forests, including northwestern and southeastern Pennsylvania, the

southern Appalachians, the Shawangunk Mountains of New York, and Wachusett Mountain in Massachusetts. In addition, he has been the principal investigator of a large 35 ha plot at Harvard Forest, where every woody stem over 1 cm diameter at breast height, has been tagged, mapped, and measured twice (> 120,000 stems). He has also been an author and contributor to the Wildlands and Woodlands Conservation vision.

Neil Pederson

Neil Pederson is a senior ecologist at the Harvard Forest studying climate-forest dynamics and disturbance ecology. Born and raised in Volney, NY, Neil earned an associate degree in Math at SUNY-Morrisville, a bachelor's degree in Forest Biology at SUNY-ESF, a master's degree in forestry at Auburn University, and a Ph.D. in forest ecology and climate at Columbia University. He has been a forester, professor, and research professor before starting at the Harvard Forest. Neil focuses on the ecology of temperate, mesic forests including the eastern US, including the the Connecticut River Valley, Spain, east Asia, and the Colchic Temperate Rainforest in Turkey and the Republic of Georgia. His research interests are centered on trees, ecosystems and old-growth forests at the intersection of climate change, ecology, conservation biology, natural history, forest management and charismatic megafauna.

Robert Perschel

Robert Perschel is Executive Director of New England Forestry Foundation. Bob joined NEFF in April 2012. Previously Bob was the Eastern region director for the Forest Stewards Guild. In his 40 years as an environmental professional, he has worked on forestry, large landscape conservation, and wilderness issues. Bob worked for the forest industry before establishing his own forestry consulting business and founding the Land Ethic Institute. He is an original co-founder of the Forest Stewards Guild. Bob has a master's degree in forestry from the Yale School of Forestry and Environmental Studies and a psychology degree from Yale College.

Mike Pouch

Mike Pouch serves as Chief of Silviculture for the State of Maine's Bureau of Parks and Lands. Previously, he worked at Baxter State Park's Scientific Forest Management Area and New England Forestry Foundation. His primary interests include long term sustainable-yield forestry, public multiple-use land management, silvicultural prescription development and application, forest inventory systems, growth and yield modeling, ecological and multi-age silviculture, legacy tree retention, wildlife habitat management, carbon dynamics in forests, and timber stand improvement/forest rehabilitation. Mike received his BS and MF in forestry from the University of Maine.

Justin Schlawin

Justin is a Forest Ecologist with the Maine Natural Areas Program, a division within the Maine Department of Agriculture, Conservation and Forestry. Justin has expertise in identification and tracking of Maine's most significant areas of old forest, remote sensing, and botanical inventory. Justin manages a forest inventory in Maine's Ecological Reserves to track changes in Maine forests over time, works with public land managers towards best management of significant botanical features, conducts remote sensing models to predict the locations of Maine's significant habitats, and contributes to MNAP's statewide inventory of rare plants and rare and exemplary habitats. Justin previously worked in land stewardship for The Nature Conservancy and the Kennebec Land Trust. Justin graduated with a Bachelor of Arts degree from Bates College in Environmental Studies with a concentration in Ecology.

Suzanne Simard

Professor of Forest Ecology, University of British Columbia, researcher, author of is a Professor of Forest Ecology at the University of British Columbia and the leader of The Mother Tree Project, which researches forest renewal practices that protect biodiversity against climate change. Dr. Simard's work has been published widely, with over 170 scientific articles in peer-reviewed journals, including *Nature*, *Ecology*, and *Global Biology*. She is also co-author of the book *Climate Change and Variability*. Her latest book, *Finding the Mother Tree*, brings us into the intimate world of trees, exploring the ways in which trees learn and adapt their behaviors, remember the past, demonstrate agency over the future, and cooperate with a sophistication typically ascribed to humans. Dr. Simard's research has been communicated broadly through TED Talks and TED Experiences, as well as articles and interviews in *The New Yorker*, *National Geographic*, *The Globe and Mail*, *NPR*, *CNN*, *CBC*, and many more.

David Stahle

David Stahle is Distinguished Professor and Director of Tree Ring Laboratory at the University of Arkansas. He earned his Ph.D. in 1990 in Physical Geography at Arizona State University. He was elected Fellow of the *American Association for the Advancement of Science* in 2015. David's research concentrates on the development of tree-ring chronologies from the United States and Latin America, the reconstruction and analysis of past climate, and on the social and environmental impacts of past climatic extremes. Conservation activities concern the identification, mapping, and permanent protection of ancient forests in the United States and Mexico.

Florence Williams

Florence Williams is a journalist, author, and podcaster. She is a contributing editor at *Outside Magazine* and a freelance writer for the *New York Times*, *New York Times Magazine*, *National Geographic*, *The New York Review of Books* and numerous other publications. Florence's latest

book, *Heartbreak: A Personal and Scientific Journey*, won the 2023 PEN/E.O. Wilson Award for Literary Science Writing. Her 2017 book, *The Nature Fix*, was an Audible bestseller and was named a top summer read by J.P. Morgan. A fellow at the Center for Humans and Nature and a visiting scholar at George Washington University in Washington, D.C., Florence's work focuses on the environment, health and science. She has received many awards, including a PEN America award, two National Magazine Award nominations, six magazine awards from the American Society of Journalists and Authors, and the John Hersey Prize at Yale. Her work has been anthologized in numerous books, including *Outside 25*, *The New Montana Story*, *How the West Was Warmed* and *Best American Science and Nature Writing 2008*. Florence serves on the board of two of her favorite non-profits, the Trust for Public Land and the Ted Scripps Fellowship in Environmental Journalism.

Bob Zaino

Bob has been working with the department since 2008. He holds a master's degree from the field naturalist program at the University of Vermont. Bob is responsible for describing and classifying Vermont's natural communities, working with landowners and the general public to conserve important natural communities, reviewing and providing recommendations on how to minimize environmental impacts of development projects, and providing presentations and field trips based on ecology, wetlands, natural communities, and biological diversity. Additionally, Bob is also responsible for conducting state-wide inventories of natural communities as well as identifying opportunities to protect biological diversity and landscape-scale features (such as large habitat blocks and wildlife corridors). During his time off, Bob enjoys fly-fishing, rock climbing, canoeing, and backcountry skiing.

Carolyn Ziegra

Carolyn Ziegra is a Research Forester for the Appalachian Mountain Club based out of Greenville, Maine. She helps facilitate research projects with various partners, implements early intervention silvicultural practices, and oversees land management activities. Carolyn's position is centered around AMC's Maine Woods Initiative which includes over 100,000 acres of forest land at the southern end of the North Maine Woods. Her work helps achieve AMC's land management objectives of creating more resilient forest structures that encourage the growth of late-successional species and stand characteristics.