The Health of the Forest:

What does that Mean and Why does it Matter?

The 31st Annual Conference on Urban and Community Forestry

and 15th Annual Forest Forum

A conference for everyone interested in trees and forests. We invite all to attend, from loggers to arborists to foresters and town council representatives. Forest health is important for all.

Wednesday, October 23, 2019

Aqua Turf Club, 556 Mulberry Street, Plantsville, CT

To register and for further information, visit the CUFC website: https://cturbanforestcouncil.org

8:00	Exhibit area open
8:30-9:00	Registration and visit with exhibitors
9:00-9:15	Welcome and Opening Remarks Heather Dionne – CUFC Chair/ City Forester, Hartford Eric Hammerling – Executive Director, CFPA
9:15-10:00	***Proforestation Management for Climate and Human Health: The Importance of Forests in Combatting Climate Change*** Bill Moomaw, Emeritus Professor of International Environmental Policy and Founding Director of the Center for International Environment and Resource Policy at the Fletcher School. *Proforestation: growing additional existing forests as intact ecosystems.*
10:00-10:15	Break
10:15-11:00	***The 2020 Connecticut Forest Action Plan: Leading into the Next Decade*** Dan Peracchio, CT DEEP Forest Planner & Legacy Coordinator Mary Tyrrell, former director of the Global Institute of Sustainable Forestry
11:00-12:15	Morning Breakout Sessions *A)* ***The Prospect for Ash in Connecticut – in the Near Term and the Long Term*** – Richard Cowles & Claire Rutledge *B)* ***Deer, Pathogens, Health: Forest Health, Wildlife Diversity, Tick Abundance and Human Pathogens*** – Scott Williams & Megan Linske
12:15-1:30	Lunch and Awards Ceremony – Network with Exhibitors
1:30-2:45	Afternoon Breakout Sessions *C)* ***Forest Management Considerations Following Gypsy Moth Defoliation*** – Dan Evans, CT DEEP State Lands Forester D) ***Managing the Forest for Wildlife Diversity*** – Peter Picone, CT DEEP Wildlife Biologist
2:45-3:00	Wrap-up session

Morning Sessions

Proforestation Management for Climate and Human Health: The Importance of Forests in Combatting Climate Change

Our awareness of the importance of forests has grown to include understanding the forest's role in climate change, human health, the extinction crisis, resiliency needs and other major planetary concerns. As our understanding of forests have evolved, so should our approach to managing them. Foresters, the public and state agencies all have a part to play in adapting to these new realities. Dr. Moomaw will discuss these changing realities, including the role of urban trees and the great importance in terms of the benefits we receive from them.

Bill Moomaw, Ph.D., is Emeritus Professor of International Environmental Policy and Founding Director of the Center for International Environment and Resource Policy at the Fletcher School. He received his B.A. degree in chemistry from Williams College and Ph.D. in physical chemistry from MIT. He taught for 26 years at Williams College, where he directed the Center for Environmental Studies. He began working on climate change in 1988 as the first director of the climate program at World Resources Institute in Washington. He has been a lead author of five Intergovernmental Panel on Climate Change (IPCC) Reports. The IPCC shared the Nobel Peace Prize for its climate work in 2007. He is currently working on natural solutions to climate change with a focus on increasing carbon dioxide removal and sequestration by forests, wetlands and soils to complement emission reductions from land use changes and replacing fossil fuels with zero carbon renewable energy.

The 2020 Connecticut Forest Action Plan: Leading into the Next Decade

The results of a survey and public roundtable discussions regarding the Connecticut Forest Action Plan will be discussed. The Forest Action Plan acts as a guide for forestry in Connecticut as we seek to improve and protect Connecticut's forest resources for future generations. It is being developed by the DEEP Division of Forestry in collaboration with a wide range of partners and stakeholders. The Action Plan will identify and prioritize important issues, needs and values. It will include an analysis of the current conditions and trends within Connecticut's forests and lay out strategies and action steps for the future of the state's forested landscape. The Connecticut Forest Action Plan is to be completed by June 2020.

Mary Tyrrell is the former Executive Director of the Global Institute of Sustainable Forestry at Yale's School of Forestry and Environmental Studies. Her work focused on landowner dynamics, land use change, forest fragmentation, and sustainable forest management on U.S. private lands. She founded and led the Sustaining Family Forests Initiative, a national coalition aimed at improving the effectiveness of outreach, services and programs for family forest owners, thus enhancing conservation and stewardship of America's private lands.

Dan Peracchio is the Forest Planner for the Connecticut Department of Energy and Environmental Protection Forestry Division. He oversees and coordinates the preparation of Connecticut's Forest Action Plan update, a requirement of the USDA Forest Service. His position also entails managing the Forest Legacy Program and the Forestry Division's federal grants.

Deer, Pathogens, Health: Forest Health, Wildlife Diversity, Tick Abundance And Human Pathogens

White-tailed deer have had a tumultuous existence in Connecticut over the past two centuries, from being

driven to near extinction to being so abundant they are a threat to public safety and forest health. Not only are deer vital hosts for blacklegged or "deer" ticks, but they are also ecosystem engineers and can shape tree species diversity and abundance. It has been becoming increasingly evident, largely due to deer, that human and forest health are linked. Scott will discuss why proper forest management is vitally important to benefit the health of Connecticut's citizenry.

There are a multitude of factors that influence the spread of vector-borne and zoonotic diseases. For tick-borne diseases in particular, these factors can affect both human and wildlife health. Both abiotic and biotic conditions can severely impact short and long term variations in these vectors and their associated pathogens, but habitat often plays one of the largest roles. Megan will discuss in particular the role of forest health and how it is altering the density and dispersion of hosts, vectors, and pathogens.

Megan A. Linske, Ph.D.
Megan received her BS from Nazareth College, and master's and Ph.D. from the University of Connecticut in Natural Resources. She is a postdoctoral research scientist in the Department of Entomology at the Connecticut Agricultural Experiment Station in New Haven. Her research focuses on the role of hosts and habitat on vector-borne and zoonotic diseases.

Scott C. Williams, Ph.D.
Scott received his B.A. from Connecticut College, his master's from the Yale School of Forestry, and his Ph.D. in Natural Resources from the University of Connecticut. He is an Associate Scientist in the Department of Forestry and Horticulture at the Connecticut Agricultural Experiment Station in New Haven. His research focuses on making connections between the health of Connecticut's forested ecosystems and its people.

The Prospects for Ash in Connecticut – in the Near Term and the Long Term
The killing front for emerald ash borer (EAB) is making its way across Connecticut. We will review the biology and impact of EAB, results from a trial in Hartford demonstrating the usefulness of trunk injections of systemic insecticides, and promising data in establishing biological control of EAB.

Richard Cowles, Ph.D.
Rich Cowles received his B.S. from Cornell University and his Ph.D. from Michigan State. He has worked for the last 25 years as a scientist at the Connecticut Agricultural Experiment Station. His work focuses on the practical management of pests ranging from annual bluegrass weevil to Zimmerman pine moth.

Claire Rutledge, Ph.D.
Claire Rutledge is an Associate Agricultural Scientist at CAES. She is an alumna of Oberlin College who earned her Ph.D. at the University of Illinois. She specializes in behavior, detection and management of invasive wood-boring insects.

Afternoon Sessions

Forest Management Considerations Following Gypsy Moth Defoliation
In portions of Connecticut, gypsy moth defoliations from 2015 to 2018 have been the most damaging in over 30 years. Many forest owners have suffered significant tree mortality following multi-year defoliation and

drought. Please join us as we examine the effects of past defoliation, discuss forest management options, and detail steps forest landowners can take to promote forest health and defend against future gypsy moth impact.

Dan Evans

Dan Evans is a State Lands Forester for the Connecticut Department of Energy & Environmental Protection. Dan was trained at the University of Vermont and has been practicing forestry for over 12 years. He has experience in the public, private, non-profit, and research sectors. He initially came to DEEP in 2011 and was hired permanently by the Agency in 2016. As State Lands Forester, Dan is responsible for practicing forestry at Pachaug State Forest, Connecticut's largest State Forest and perhaps one of the areas most affected by recent gypsy moth activity. Dan also works with the DEEP Wildlife Division on habitat management projects carried out within the State Wildlife Management Areas. He lives in Brooklyn, CT, and is an active member of Eastern Connecticut Forest Landowners Association and Wolf Den Land Trust.

Managing the Forest for Wildlife Diversity

Enhancing land for biological diversity requires the thoughtful management of plants. Connecticut DEEP Wildlife Biologist Peter Picone will share his knowledge and insights on enhancing habitat at both small and large scales. He will give examples of ecologically-based actions used to improve biological diversity at Sessions Woods Wildlife Management Area in Burlington, CT, Charter Oak Tree Farm located in Sprague, CT, and his residence in Southington, CT. He will speak on improving habitats using a variety of methods including forestry, planting/seeding, invasive plant management, meadow establishment, and selective nest box placement. During his presentation, he will show short video out-takes to illustrate the inextricable link between plants and animals.

Peter Picone

Mr. Picone is a senior wildlife biologist for the Connecticut Department of Energy and Environmental Protection with over 30 years of experience. His work includes directing the management of state wildlife management areas in the western district. He is also owner and land manager of Charter Oak Tree Farm, a 40 acre property on which he has been restoring and enhancing habitat. He is a steering committee member of the Connecticut Invasive Plant Working Group, Connecticut Envirothon Steering Committee, and board member of the Quinnipiac River Watershed Association.

CEUs Offered:

Attendees will have the opportunity to earn continuing educational unit (CEU) credits towards the renewal of their various licenses and certifications, according to the following list:

<u>Pesticide Supervisory Licenses</u>

CT Ornamental and Turf License (Category 3A) – 4.0 CEUs
CT Arborist License (Category 3D) – 4.75 CEUs
CT Forest Pest Supervisory License (Category 2) – 4.75 CEUs

Forest Practitioner Certification – CEUs pending
Advanced Certified Tree Wardens – 4.75 CEUs

Licensed Landscape Architects are encouraged to refer to the Department of Consumer Protection, Board of Landscape Architects for current Connecticut State requirements.