University of Washington
College of Forest Resources

Denman Forestry Issues Series presents:

Spring 2006

Sustainable Urban Ecosystems: Physical and biological environments

June 1 , 2006, 2-5 p.m.
NHS Hall, Center for Urban Horticulture
College of Forest Resources
University of Washington

Attendance at the recording session is free and open to the public, but seating is limited and reservations are required. Contact Ellen Matheny for information.

Program Agenda

Introduction – **Bruce Bare**
Moderator **– Bob Edmonds**

"Urban Hydrology and Climate" **Rich Horner**

"Urban Soils and Streams of Seattle " ***Robert Harrison***

"The Original Vegetation of Seattle and How It Has Changed " **Ray Larson**

"Wildlife in Urban Ecosystems" **John Marzluff**

"Urbanization and Salmon " **Robert Bilby**

"Urban Forests: A lost cause? " **Ella Elman**

Panel Discussion

Speakers

Robert Bilby, Chief Environmental Scientist, Weyerhaeuser Company, BS in zoology from the University of Rhode Island and PhD in ecology from Cornell University. Dr. Bilby has conducted research on stream ecosystems, salmon, and the effects of forestry on both since 1975. He is responsible for coordinating Weyerhaeuser's environmental research efforts on all company forest lands. Prior to this position, Dr. Bilby managed the Environmental Forestry Research Program in

Weyerhaeuser's Western Forestry Research Program. From 1998 through 2000, he managed the Watershed Processes program at the National Marine Fisheries Service's Northwest Fisheries Science Center in Seattle. He is an affiliate faculty member at the UW's College of Forest Resources and School of Aquatic and Fisheries Science. His research has included investigation of the role of large wood in streams and the impact of forestry on this material, response of stream trophic systems to disturbances, relationships between habitat characteristics and salmon productivity, and the contribution that spawning salmon make to the nutrient capital and productivity of streams and ripairian areas.

Ella Elman, Field Ecologist, Seattle Urban Nature Project, BS in natural resources from Cornell University and MS in ecosystem analysis, UW College of Forest Resources. She has held a wide variety of jobs in academia, government, and the non-profit sector. Her experience includes working with volunteers at the Cornell Cooperative Extension in New York, researching fuel loadings at the U.S. Forest Service PNW Research Station, and patrolling King County as a Noxious Weed Specialist. The Seattle Urban Nature Project is a non-profit organization dedicated to monitoring and improving the condition of urban forests in the Puget Sound area.

Robert Harrison, Professor of Environmental and Soil Science, UW College of Forest Resources. Dr. Harrison received degrees in soil science and forestry from North Carolina State University, the University of New Hampshire, and Auburn University (Alabama), and completed a postdoctoral research associateship at Oak Ridge National Laboratory in Oak Ridge, Tennessee. He has studied nutrient, heavy metal and pathogen movement in soils, the impacts of compost, biosolids wastewater, and fertilizer additions on soil/plant systems, the use of organic wastes as soil amendments, long-term forest productivity, the impacts of forest fertilization and management on forest soil properties and carbon sequestration.

Richard Horner, Research Associate Pofessor, Department of Landscape Architecture, UW College of Architecture and Urban Planning. Dr. Horner received engineering BS and MS degrees from the University of Pennsylvania and a PhD in civil and environmental engineering from the UW in 1978. Following 13 years of college teaching and professional practice, he joined the UW research faculty in 1981. His principal research interests involve analyzing the effects of human activities, especially in urban areas, on freshwater ecosystems and solutions that protect these resources. He founded the Center for Urban Water Resources Management (now part of The Water Center) in 1990 to advance applied research and education in these areas. He now splits his time between private practice and the UW, where he also holds adjunct appointments in Civil and Environmental Engineering and the College of Forest Resources.

Ray Larson, UW Lead Gardener, AB in history and economics from Ripon College in Wisconsin, and MS in environmental horticulture and urban forestry, UW College of Forest Resources. His MS degree focused on public garden management; his thesis, "The Flora of Seattle in 1850: Major Species and Landscapes Prior to Urban Development" is the first comprehensive attempt to research and describe the plant species and type of ecosystems that existed in Seattle before it was settled by Euro-Americans. Mr. Larson worked for 10 years as Facilities Coordinator at the UW Center for Urban Horticulture. He currently serves as Head Gardener at Hill-Crest, owned by the UW and the home of UW President Mark Emmert and his wife DeLaine. Hill-Crest's 1.5 acre garden is undergoing a comprehensive renovation after 30 years of relative neglect.

John Marzluff , Professor of Wildlife Science, UW College of Forest Resources, where he also holds the Denman Chair in Sustainable Resource Sciences and directs the Urban Ecology Program. His graduate (Northern Arizona University) and post-doctoral (University of Vermont) research focused on the social behavior and ecology of jays and ravens, especially communication, social organization, and foraging behavior. His current research brings this behavioral approach to pressing conservation issues including raptor management, management of pest species, and assessment of

nest predation. His recent book, In the Company of Crows and Ravens (with Tony Angell, 2005 Yale U. Press) blends biology, conservation, and anthropology to suggest that human and crow cultures have co-evolved. He has led studies on the effects of military training on falcons and eagles in southwestern Idaho, the effects of timber harvest, recreation, and forest fragmentation on goshawks and marbled murrelets in western Washington and Oregon, conservation strategies for Pacific Island crows, and the effects of urbanization on songbirds in the Seattle area. Dr. Marzluff has authored over 100 scientific papers on various aspects of bird behavior and wildlife management. He is a member of the board of editors for Bird Behavior, Acta Ornithologica, and Ecological Application and has edited several books on avian conservation. He is currently leader of the U.S. Fish and Wildlife Service's Recovery Team for the critically endangered Mariana Crow. He is an Elected Member of the American Ornithologist's Union (1993) and serves on the board of the Cooper Ornithological Society.

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