

Applications of i-Tree Tools in Higher Education and Outreach in Virginia

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ABSTRACT

The i-Tree tools are not only powerful for assessing and planning urban forests, but also for teaching fundamentals of urban forest structure and function and empowering communities to steward their local tree resources. The Virginia Tech Department of Forest Resources and Environmental Conservation delivers a comprehensive urban and community forestry program for its students and its stakeholders around the state. Since the launch of the i-Tree tools in the mid-2000s, Virginia Tech has been incorporating i-Tree tools into instruction of its arboriculture and urban forestry courses to teach students fundamental concepts and procedure for urban forest assessment, planning, and management. Through partnerships with Virginia Cooperative Extension and Virginia Department of Forestry, Virginia Tech has also led studies of municipal forests and street tree populations to examine potential impacts of emerald ash borer on forest composition and ecosystem services. To promote data-driven, evidence-based urban forest planning and management, Virginia Tech has also introduced i-Tree tools to arborists, urban foresters, and citizen-scientists around the state through seminars and workshops. Students leaving Virginia Tech are entering the urban forestry workforce with greater awareness of urban forest assessment techniques and Virginia localities are using urban forest information to better inform their policy and planning decisions. This presentation will give an overview of how i-Tree tools have been used by Virginia Tech for higher education and outreach and offer recommendations on how to incorporate the tools into classroom and field settings for diverse audiences and stakeholder groups.

BIOGRAPHY

Eric Wiseman is an associate professor of urban and community forestry in the Department of Forest Resources and Environmental Conservation at Virginia Tech in Blacksburg, VA. He holds B.S. and M.S. degrees in Forestry and Wildlife from Virginia Tech, and a Ph.D. in Forest Resources from Clemson University. Prior to entering academia, Dr. Wiseman worked as a commercial arborist in the southeastern United States and is an ISA Certified Arborist and Qualified Tree Risk Assessor. Dr. Wiseman's research and extension efforts focus on tree care practices, urban forest ecophysiology, and green infrastructure assessment and management. His teaching at Virginia Tech includes lecture and lab courses in urban forestry and arboriculture. He is also state coordinator for the Virginia Big Tree Program. Dr. Wiseman has held numerous leadership positions, including serving on the executive committee of the Arboricultural Research and Education Academy, the accreditation committee of the Tree Care Industry Association, the board of directors of the Virginia Urban Forest Council, and the board of directors of the Mid-Atlantic Chapter of the International Society of Arboriculture. Dr. Wiseman has won several awards for his research and teaching accomplishments, including the ISA Early-Career Scientist Award in 2012, the Outstanding Faculty Award of the Virginia Tech Department of Forest Resources and Environmental Conservation in 2014, and the Alex L. Shigo Award for Excellence in Arboricultural Education in 2016.

