Urban Forestry 2020:

Formulating a Strategy for our Emerging Profession

by Susan D. Day and Gregory A. Dahle

Sometimes it seems the whole world is excited about city trees. Million Tree initiatives and enthusiastic grass-roots groups are in the news, green infrastructure solutions are increasingly mainstream, and even the Centers for Disease Control, the U.S. federal public health agency, has recognized the contribution of vegetation to human health through their Healthy Community Design Initiative.

Yet university programs in urban forestry have low enrollment, urban foresters have to work hard to build understanding and respect for their profession within city government, funding is stagnant or declining at the federal level, and many urban foresters face uncertain career advancement prospects—all

while urban tree canopy continues to decline. Is the future rosy for urban foresters, or is it dire?

At the root of this question is a host of issues relating to public perception, professional practice, educational opportunities, and even research support for the profession of urban forestry. What will urban forestry look like when we emerge from the rapid demographic and environmental shifts that are underway in our cities? Who will be practicing urban forestry and where? How will they be educated and how much influence will they have on urban environments? Where will new knowledge come from? How will decision-makers recognize urban forestry expertise? The answer to these and

many other questions will shape the urban forests of tomorrow.

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Urban Forestry 2020 is a multi-year collaborative project to analyze the status of the urban forestry profession in the United States and recommend strategies for moving it forward. This research and networking project, partially funded by a U.S. Forest Service grant through the National Urban and Community Forestry Advisory Council (NUCFAC), brings together researchers from Virginia Tech, West Virginia University, University of Maryland, and Virginia State University to carry out a multi-faceted strategic assessment.

The project is national in scope, with survey respondents coming from all over the U.S. Although the project directive is to examine the urban forestry profession within the United States, researchers have found that although the players may be different, analogous issues exist around the world. Therefore, much of this work will likely resonate with a broader audience.

A steering committee, selected from leaders around the country within urban forestry and associated fields such as stormwater engineering, urban planning, and landscape architecture, is serving in an advisory capacity and as a project sounding board. SMA Executive Director Jerri LaHaie serves on the steering committee along with ISA Executive Director Jim Skiera (for a full list of steering committee members, see the project website at *urban-forestry.frec.vt.edu/2020*). Scheduled to be complete in 2017, the project is using survey research, focus groups, and networking to focus on these issues of professional recruitment and education.

How are the demographics of our field changing? Photo by Michelle Sutton

To begin this process, it is useful to examine the history of the profession. In the United States, modern development of the profession of "Urban Forestry" can ostensibly be viewed as beginning in the early 1970s when Congress added the stewardship of urban forests to the responsibilities of the U.S. Forest Service. Forty years later, urban forestry is a vibrant and expanding field of study that is clearly not practiced exclusively by, or even predominantly by, those trained in traditional natural resource management fields such as forestry. Instead, natural resource managers have been joined

One of the ways the SMA has shaped the field of urban forestry is through the annual Municipal Forestry Institute. Photo by Paul Ries

Urban foresters come together to learn and network at the annual SMA conference. Photo by Michelle Sutton

by arborists, horticulturists, and landscape architects who have brought their expertise in managed trees and landscapes to the table, contributing to the now considerable body of knowledge in urban forestry that has emerged over recent decades. In more recent years, social scientists, planners, ecologists, and geographers are weighing in and making significant contributions to urban forestry practice and our knowledge base.

With many enthusiastic participants coming from a wide variety of educational and professional backgrounds, a career in urban forestry can be difficult to visualize clearly. What is the career trajectory of an urban forester? What type of education should an urban forester have? Are urban foresters well networked? What is the highest professional recognition an urban forester

can have? Do urban foresters get the professional respect and funding needed to get the job done?

The answers to these questions depend upon whom you ask—their professional and educational background, where they work, and their area of specialization. The diversity inherent in the world of urban forestry is stimulating and exciting—but creates difficulties as well. There are numerous allied professions that directly address urban forest management, while professionals of many stripes indirectly make urban forestry management decisions, whether they realize it or not. Municipalities vary considerably in how they avail themselves of urban forestry knowledge, contributing to this confusing picture of our profession.

So where do urban foresters turn for

professional development, education, or engagement? Clearly the Society of Municipal Arborists (SMA) is a long-standing leader in professional development for urban foresters with its track record of more than 50 years of annual conferences and more than a decade since the first Municipal Forestry Institute and the first SMA Arborist Exchange. Yet urban forestry conferences are offered by everyone from grassroots nonprofits to the Association of American Geographers. Green infrastructure and low impact development conferences are largely populated by engineers and other allied professionals who are thereby, in fact, planning significant portions of the urban forest.

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Should future urban foresters

pursue degrees in forestry, arboricul-

ture, social sciences, horticulture, or urban planning? What do the few academic programs that are tagged "urban forestry" have to offer? The undergraduate program at Virginia Tech, for example, includes a foundation in forest and tree biology and ecology followed by coursework in soils, hydrology, arboriculture, urban tree measurements, policy, management, geospatial analysis, community engagement, and urban planning, among others—all geared to prepare students to manage natural resources in the complex municipal environment. Is this too specialized an education, or is it not enough? Although the hiring market in commercial tree care is always strong, what municipal careers are open to urban forestry program graduates? Will graduate school become a prerequisite for urban foresters?

Unfortunately, the confusing picture presented by the present day practice of urban forestry can make recruitment into the profession, development of professional standards and best practices, and promotion within the field difficult. Many urban foresters relate that they "accidentally fell" into the profession—starting out in an allied field and gradually gaining specialized skills and knowledge over the course of their careers. Yet as our body of knowledge grows, learning-as-you-go may no longer be the best option, and accidental recruitment isn't enough to support the growing need for urban foresters. It is common for professions (consider landscape architecture as an example) to go through such growing pains.

Our highly urbanized, interconnected world is now becoming fully cognizant of the power of interdisciplinary problem solving, and urban forestry should be in the thick of urban decision making. Urban forestry is highly interdisciplinary and also a young and emerging profession—creating a unique opportunity to analyze the state of the profession and map our way forward. Urban Forestry

2020 is making this assessment in the context of university programs, student career goals, professional perceptions in the municipal environment, and networking. The project team continues to work diligently to be inclusive yet specific in its conception of urban forestry: specific in studying urban forestry—the management of populations of trees in urban settings—yet inclusive in reaching all people working in this field, regardless of their professional networks.

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So what is an urban forester

and what is urban forestry? Based on discussions with the steering committee and at various professional meetings, we have identified key strengths that professionals designated as "urban foresters" bring to the management of urban green spaces. Urban foresters are more likely than allied professionals (who may practice aspects of urban forestry—e.g., urban planners, developers, landscape architects, natural resource professionals, or traditional foresters) to be engaged in forest health, inventory and risk assessment, planting trees, and arboricultural practices. On the other hand, urban foresters are equally likely to be engaged in green infrastructure planning and less likely to be engaged or consulted in land use planning.

Furthermore, while urban foresters feel that they have multiple valuable local or regional networks and organizations that help them problem solve, there is NO universal list of professional development organizations. How the networking landscape develops over the next decade may be hard to forecast because communication among professionals is increasingly linked to social media and is highly dynamic. As others have observed, millennials like to push boundaries in career and networking exploration and may quickly form new groups for problem-solving. How effective are such networks at the collective action that is needed to elevate urban

forestry as a valued profession? That is uncertain, but what is certain is that we will continue to see changes in urban forestry networking, and they may be quite rapid.

Urban Forestry 2020 is using both research and exploratory focus groups and networking to develop meaningful recommendations for urban forestry. To date we have developed and vetted diagrams of urban forestry practice and multiple surveys are either complete or underway concerning perceptions of urban forestry. In one project developed by Virginia Tech doctoral student Keith O'Herrin, 18 months of national job postings for urban foresters have been analyzed against the "body of knowledge" expected of urban foresters. We anticipate identifying professional and regional trends: What level of education is required? What types of duties and academic disciplines cluster together? What are the pay scales?

West Virginia University graduate student Andrew Benjamin developed a survey querying the largest 200 cities in the United States on their hiring practices for entry-level urban foresters. A companion "snowball" survey solicited this information from those who make entry-level urban forestry hiring decisions. What skills (technical, administrative, and communication) are the managers of our city trees looking for when hiring entry-level urban foresters, and do they observe any deficiencies? Are the necessary skills of a municipal forester different from those of other urban forestry professionals (consulting, non-profit, private organization)?

Although urban forestry has long worked to promote urban trees and foster more awareness from the public, this has not translated into a sizable upturn in the number of young people seeking urban forestry education or pursuing urban forestry as a profession. Earlier this year, Virginia Tech conducted a survey of first- and second-year college

SMA Interns reunite at the annual conference. What will the next 40 years bring and how shall we steer the professional ship? Photo by Michelle Sutton

students that introduces urban forestry through a short video and asks how these students view the profession as a potential career. These data are being analyzed in the context of student demographics, family values, and career preferences.

A final survey will assess how urban foresters are networking. We encourage everyone to keep an eye out for this last survey and promote it widely to help the project gain the most reliable information possible. The project will culminate in a set of strategic recommendations based on these research findings and supported by exploratory conversations with professionals engaged in urban forestry. The SMA is playing a critical role in this

discovery process and how the urban forestry profession will use the project findings.

This is an exciting time for the management of our urban resources, but one that needs to be navigated with deliberation. Over the past 40 years urban forestry has grown from a congressional mandate to a profession that, while still young, is changing the way we consider the natural resources in and around our cities, towns and communities. Urban forestry is coalescing and developing organically, whether we are ready for it or not. Our profession is interdisciplinary by nature and its boundaries are being pushed on all sides. What will the next 40 years bring and how shall we steer the

professional ship? With Urban Forestry 2020, we hope to provide some of the answers, or at least some guidance as we find our way.

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Other members of the UF2020 research team include: P. Eric Wiseman (Virginia Tech), Joe Sullivan (University of Maryland), Joel Koci (Virginia State), Keith O'Herrin (Virginia Tech), and Andrew Benjamin (West Virginia University). For more details, visit *urbanforestry.frec.vt.edu/2020*. 🍂