URBAN FORESTRY 2020
Insights into Professionalism, Higher Education, and Career Advancement

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PRESENTATION OUTLINE

- What is Urban Forestry 2020?
- What did we examine in Urban Forestry 2020?
- What did we discover in Urban Forestry 2020?
- What is next for Urban Forestry 2020?
WHAT IS URBAN FORESTRY 2020?

- Multi-institution study of urban forestry higher education and professional practice
- Funded by the U.S. Forest Service on recommendation of the National Urban and Community Forestry Advisory Council (NUCFAC)
- Guided by 20-member steering committee representing diverse national stakeholder groups
- Employed various study methods on national scale: literature review, surveys, focus groups, and interviews
- Goal: Provide empirical basis for strategic recommendations on advancing the profession
WHAT IS URBAN FORESTRY 2020?

Our Operational Definition of Urban Forestry

Policy, planning, and management of large populations of trees in a municipal context—conducted by a local government employee, contracted consultant, or equivalent authority on behalf of the citizenry.
WHAT IS URBAN FORESTRY 2020?

How is Arboriculture Professionally Different from Urban Forestry?

- Strong professional identity with the public
- Full complement of professional support mechanisms
  - Well-defined body of knowledge
  - Well-delineated career ladder
- Robust membership organization
- Professional preparation and training needs are different
WHAT DID WE EXAMINE IN URBAN FORESTRY 2020?

Urban Forester Career Paths and Networking
- Nationwide survey of 524 municipal tree managers
- Who manages urban forests and what are their perceptions
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**Urban Forestry Job Postings**
- Analysis of 151 job postings and interviews with new hires
- What do the jobs entail and is a career ladder evident
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|-------------------------------------------|-----------------------------------------------------------------------------------------------------|
| Urban Forestry Job Postings               | Analysis of 151 job postings and interviews with new hires  
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| University Student Perceptions            | Nationwide survey of 1,000 students at 18 universities  
Previous knowledge, impressions, and career choice |
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Employer Expectations for New Hires
- Nationwide survey of 200 urban forestry employers
- Expected skills of new hires and their proficiency
WHAT DID WE DISCOVER IN URBAN FORESTRY 2020?

Urban Forester Career Paths and Networking

OF THE 524 RESPONDENTS,

- 91% white, 78% male, median age: 52
- Only 15% had seriously considered a career in urban trees and greenspaces in high school or earlier
  - 75% in a supervisory role (mid to upper management)
- 82% in profession for 10+ years and 47% for 21+ years (mid to late career)
- Top memberships: International Society of Arboriculture (59%), Local urban forestry group (38%), Society of Municipal Arborists (28%), National Recreation and Park Association (22%)
- 17% didn’t belong to any of the 25 professional organizations we asked about.

Professional Identity of Municipal Tree Managers in the U.S.

- 33% Urban Forester
- 21% Public Administrator
- 12% Arborist
- 11% Allied Professional*
- 23% Other

* Such as civil engineer, landscape architect, and urban planner

1. Lack of professional management
2. Professional encroachment
WHAT DID WE DISCOVER IN URBAN FORESTRY 2020?

Urban Forestry Job Postings

**WHO ARE THE EMPLOYERS?**
- 6% NGO
- 1% Federal Gov't
- 7% University*
- 11% State Gov't
- 13% Commercial
- 62% Local Gov't

* Teaching positions were intentionally excluded from all consideration

**MOST COMMON WORDS IN JOB TITLES**
- 26% ... included urban forest, forestry, or forester
- 23% ... included forest, forestry, or forester but WITHOUT the words urban, or community
- 17% ... included arborist, arboriculture, or arboricultural
- 14% ... OMITTED any reference at all to forestry, urban forestry, arboriculture, or trees

**TOP PREFERRED DEGREES**
These are the top degrees mentioned by name in the postings. (% of total postings)
- 57% Forestry
- 40% Horticulture
- 35% Urban Forestry
- 25% Arboriculture
- 17% Environmental Science

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Field production arborist, particularly with commercial tree care companies, is the surrogate entry-level position for degreed young professionals. This is a strong filter for diversified talent into the urban forestry profession and may not be a reliable precursor to proficiency.

*Average annual income
#Entry level was defined as requiring 1 year or less of experience.
All positions that fell into this category required a degree.
WHAT DID WE DISCOVER IN URBAN FORESTRY 2020?

University Student Perceptions

U.S. College Student Awareness of Urban Forestry

- 16% very aware
- 33% not aware
- 22% moderately aware
- 29% slightly aware

Which College Students are More Aware of Urban Forestry

Suburban students are the least aware of urban forestry.

Men are more aware of urban forestry than women.

Students who participate with their families in outdoor nature-based activities are more aware of urban forestry.
WHAT DID WE DISCOVER IN URBAN FORESTRY 2020?

University Student Perceptions

ONCE STUDENTS LEARN ABOUT URBAN FORESTRY—WHAT DO THEY THINK?

What Do College Students Seek in a Career?

• To have PASSION and ENTHUSIASM for the work
• For the work to be MEANINGFUL
• Having OPPORTUNITIES or new challenges
• Having a definable CAREER LADDER

• After watching a brief video about a career in urban forestry, students had a favorable impression overall.
• Race and ethnicity have no influence on impression of urban forestry, but African-American students place greater importance on pay and prestige as well as career support from a professional society.
• Students from high-income families (>\$150K per year) and those who care more about pay and prestige have the least favorable impression of urban forestry.

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Employer Expectations for New Hires

Majors of Entry-Level Urban Foresters Most Valued by U.S. Employers

- Urban Forestry
- Arboriculture
- Forestry
- Horticulture
- Natural Resources Mgmt.
- Urban Planning
- Environmental Science

Credentials of Entry-Level Urban Foresters Most Valued by U.S. Employers

- ISA Certified Arborist
- Commercial pesticide applicator license
- ISA Certified Arborist Municipal Specialist
- Commercial driver’s license
- SAF Accredited Urban Forestry Degree
- SAF Accredited Forestry Degree

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Employer Expectations for New Hires

WHERE EXPECTATIONS ARE NOT MET

These skills were highly valued but recent hires did not meet employer’s expectations

Managerial
- Employee supervision

Technical
- Root management and root pruning
- Tree assessment and risk management
- Tree disorder diagnostics

Communication
- Conflict resolution
- Public relations/customer service

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WHAT IS NEXT FOR URBAN FORESTRY 2020?

○ Comprehensive project website to be launched next month: www.uf2020.frec.vt.edu

○ Comprehensive summary report to be published on the website next month

○ Currently have 3 peer-reviewed publications:
  • 1 at Journal of Forestry (in press)
  • 2 at Urban Forestry & Urban Greening (in revision)

○ Recommendations for Strategic Action are currently under review by our steering committee
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