2023 INDUSTRY WORKFORCE SUMMIT REPORT

PIPELINES + PATHWAYS

ARBORICULTURE AND URBAN FORESTRY PROFESSIONALS

A Pre-forum Workshop to the World Forum on Urban Forests
15 October 2023, Washington DC

This report was made possible through the efforts of the International Society of Arboriculture (ISA), the Sustainable Forestry Initiative (SFI), and the Society of American Foresters (SAF), with support from the US Forest Service.

INDUSTRY WORKFORCE SUMMIT REPORT

PIPELINES + PATHWAYS

OPENING REMARKS

This report provides an assessment of current challenges related to recruiting and retaining a sustainable workforce in the arboriculture and urban forestry sector, and outlines opportunities to address these challenges.

The challenges and opportunities documented in this report were compiled collectively in the panel sessions and group discussions that took place at the industry workforce summit hosted on 15 October 2023. This represents a collective industry effort towards collaborative action in increasing the sector's workforce capacity.

CAITLYN POLLIHAN

CEO AND EXECUTIVE DIRECTOR

International Society of Arboriculture

Caitlyn expressed excitement about continuing the conversation initiated during the 2018 Industry Workforce Summit with this 2023 summit. Workforce challenges have changed in a post-COVID environment, and new strategies and solutions are needed to create and promote the opportunities for current and future generations to engage in arboriculture and urban forestry careers. ISA aims to understand the present workforce challenges and is interested in participants' suggestions to overcome them, individually and collectively. Caitlyn conveyed that collaboration is key to taking advantage of the workforce opportunities that are surfacing at the executive-federal level.

TERRY BAKER

CEO

Society of American Foresters

Terry indicated that the SAF's partnership with SFI and ISA are paramount for understanding industry challenges, investments, and opportunities, and unifying solutions to facilitate a robust workforce. Terry shared that SAF is interested in learning about the qualities employers seek in the workforce and where their investments are heading. Terry sees large cities as "cultural melting pots" where people of diverse cultures and backgrounds live, play, and work with each other. He applied the same concept to the mosaic of arboriculture and urban forestry professionals. Terry also mentioned that SAF looks forward to the actionable next steps—developed through this summit—that will come to fruition.

PAUL JOHNSON

VICE PRESIDENT, URBAN AND COMMUNITY FORESTRY AND CAREER PATHWAYS

Sustainable Forestry Initiative

Paul expressed that 2023 would be an inflection point for urban and community forestry. The arboriculture and urban forestry sector will reflect on the importance of this year as it was marked by the historic investment of the US Forest Service in urban forestry, SFI's new standard, and the World Forum on Urban Forestry. Paul described that for SFI, two pinch points exist when looking at the next 5 to 10 years: (1) access to trees to plant and (2) access to people who plant and maintain those trees. Arboriculture has observed workforce shortages for years, and it will only worsen unless the sector can unite to develop widespread and steadfast actions. Paul also shared that although SFI is new to urban and community forestry, the organization is excited to collaborate and coordinate efforts to make real differences.

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PARTICIPATING ORGANIZATIONS

Arborholic, LLC
Arizona State University
City of Norfolk
Coccoloba AgroEnvironmental LLC
Davey Resource Group
Davey Tree Expert Company
Groundwork Bridgeport, Inc.
International Society of Arboriculture
Society of American Foresters
Sustainable Forestry Initiative
The Corps Network
Tree Trust
TreePeople
Trees Forever
Ulman Public Policy
University of California
University of Georgia Warnell School of Forestry and Natural Resources
Urban and Community Forestry Society
Yale School of the Environment

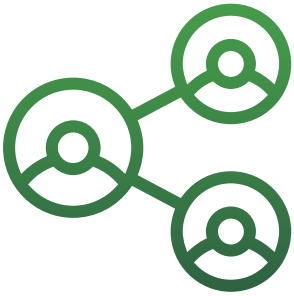
This report was compiled based on notes taken at the Industry Workforce Summit on 15 October 2023. Participants' contributions have been edited for brevity and clarity.

PANEL + SMALL GROUP DISCUSSIONS

EXISTING SKILL DEVELOPMENT MODELS TO BUILD WORKFORCE

During an initial panel session, industry professionals with experience in each skill development model described their experiences in recruiting and retaining the arboriculture and urban forestry workforce and outlined related challenges and opportunities. Small group discussions followed, allowing participants to further elucidate the successes and challenges associated with the skill development models.
For each of the skill development models, the panelists' experiences are provided first, followed by participant contributions that were generated during the small group discussions.

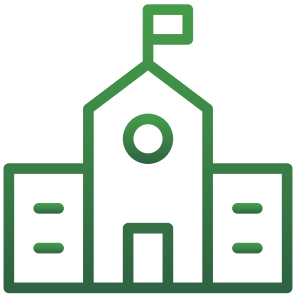
APPRENTICESHIP AND MENTORSHIP



COMMUNITY-BASED PIPELINES

CORPS MODEL

CREDENTIALING PATHWAYS



K-12 OUTREACH

APPRENTICESHIP AND MENTORSHIP

Jerri Taylor
Director of Diversity and Career Pathways at Sustainable Forestry Initiative (SFI)

SFI works to diversify the arboriculture and urban forestry sector by educating students on forestry and conservation ethics, especially tree equity in urban Black and Brown communities.

Barriers frequently observed in the arboriculture and urban forestry sector include parents being unaware of career opportunities, late engagement, few education courses, and a lack of individual knowledge in transferring skills. SFI educates people on the types of available green jobs through a holistic pedagogy. SFI begins education and outreach from preschool to fifth grade in a way so that parents, teachers, and guardians can support and participate. SFI programs in Canada offer middle school students experiential learning opportunities (e.g., apprenticeships) to explore future careers. SFI awards subsidies to different organizations that hire SFI-affiliated students through grant funding. Importantly, SFI's mentorship program is mentee-led, encouraging mentees to ask questions, build career-readiness skills, and gain networking opportunities.

SFI EDUCATES PEOPLE ON THE TYPES OF AVAILABLE GREEN JOBS THROUGH A HOLISTIC PEDAGOGY.

SFI also prides itself in creating a welcoming environment for employers, especially those actively diversifying their workforce. The organization recently published a report called *Black Faces in Green Spaces: The Professional Journey of Black Professionals in Green Careers* to understand the causes and effects of a lack of diversity in arboriculture and urban forestry. The report concludes that barriers to entering the workforce stem from generational trauma and societal behaviors that highlight differences within a community. These barriers translate into how an individual views career opportunities and how employers determine their workforce. For people to consider entering the sector, they need to see people who look like them and have similar experiences to them. Mentorship typically has the greatest impact on an individual's career interest.

PERSPECTIVES FROM PARTICIPANTS:

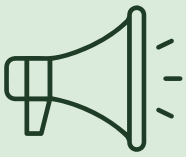
Mentorship plays an intricate role in providing support for students entering the forest and conservation sector; one of the major challenges is the trouble with finding diverse mentors to reach youth from diverse backgrounds.

Along the lines of mentorship, it's important to provide youth from diverse backgrounds with the proper wrap-around services to address issues with transportation, licenses, childcare, and other monetary resources, because mentorship is oftentimes a privilege, and for students that have to work and attend school, this is not a viable option due to the level of commitment.

To attract people to apprenticeships, it's important to make sure that careers that do not require a college degree have reasonable salaries because people shy away from the tree care industry when they see the salaries posted by the Department of Labor.

It's important to bring more awareness to apprenticeship programs and talk with school officials and counselors to change the negative connotation that is attached to trade schools and apprenticeship programs; the tree care industry can provide a great living wage and is fiscally viable where cost is a concern. It's important to educate parents on apprenticeships because many people are conditioned that college is the only way to be successful.

A challenge is getting the knowledge to schools and career centers to raise awareness among students at an early age that apprenticeships can provide many options beyond just entry level.



Regarding both apprenticeships and mentorships, representation came up a lot. There is a need to have messaging that reaches diverse populations about these career options, and the messaging should reach youth and their families early.

COMMUNITY BASED PIPELINES

Cindy Schwab
Recruitment Manager at The Davey Tree Expert Company ("Davey")

The success that Davey is experiencing in this skill development model is thanks to community organizations that are eager to work with them. Community organizations deliver employees with transferable skills, and in return, Davey offers full-time, steady employment, which many community organizations value for lifting people out of poverty into the middle class.

The community organizations that Davey works with offer "wrap-around" services, providing housing, mental health counseling, transportation opportunities, and personal protective equipment, which is sometimes hard to provide as an employer. Community organizations provide Davey access to applicants who are at least 21 years old and can pass a drug and background test. These organizations also help diversify the sector workforce thanks to the lasting relationships they build in certain communities. Required specializations were previously limiting the pool of workforce applicants, but post-COVID, Davey began working with partner organizations who are developing "workforce readiness" skills.

THE SUCCESS THAT DAVEY IS EXPERIENCING IN THIS SKILL DEVELOPMENT MODEL IS THANKS TO COMMUNITY ORGANIZATIONS THAT ARE EAGER TO WORK WITH THEM.

This model takes patience, especially with community organizations unfamiliar with arboriculture and urban forestry. By building trust and strengthening mutual benefits/objectives, the partner organizations better understand what skill sets Davey and other employers are seeking to recruit. Davey encouraged workforce summit participants to explore how local community organizations can work with employers to build a strong and lasting arboriculture and urban forestry workforce.

PERSPECTIVES FROM PARTICIPANTS

- A couple of successes through this model come from partnering with prison release programs, Future Farmers of America (FFA)/4H, anti-poverty organizations, and churches.
- The top three challenges most faced in implementing programs/programming are:

1

WORKFORCE RECRUITMENT, TRANSPORTATION, PAY, AND AGE/ EXPERIENCE

Workforce transportation is challenging because federal funding cannot be used to buy vehicles or heavy equipment. One successful solution to this challenge involved hiring vans or obtaining cars, trailers, and equipment through donations. The early and variable hours and variable crew sizes also add logistical challenges to transportation. The workforce needs to understand better that pay varies by location and that an individual can live off tree industry wages. The industry could update hiring platforms to clarify pay for potential employees.

2

SOURCING TREES AND POST-PLANTING CARE

Sourcing trees to plant is a limiting factor; there is a need to access more nurseries and supply chain resources. Employers are also struggling to find people to plant and maintain trees. Post-planting maintenance is more expensive and less alluring than funds for initial planting.

3

AWARENESS OF THE CAREER

Search engine optimization strategies can better direct those interested in the arboriculture and urban forestry sector to helpful resources and information. The industry can address the lack of awareness in the sector by better articulating the value of certifications and micro-credentials. This could happen through organizational branding (i.e., that there is value and legitimacy in SAF, ISA, and other national partners), which will help build recognition of arboriculture and urban forestry as a more respected and valid career. Developing certification-to-certification connections can also set expectations for career advancement and professional growth. Decoupling the entry credentialing requirements from the certification.

CORPS MODEL

Bobby Tillet
Director of Member Services at The Corps Network

The Corps Network, founded in 1985 as the National Association of Service and Conservation Corps, represents over 150 member Corps across all 50 states and the territories of Guam and Puerto Rico. The Corps serves about 22,000 young adults annually in paid training and service programs that promote environmental stewardship and climate resiliency. These programs work with young adults between the ages of 16 to 33 or veterans of any age who are engaged in crew-based programs or internships. The Corps Network helps individuals realize their goals and aids in potential career placements. Through this model, individuals seek personal development and are paid stipends or living allowances.

The USDA's Urban and Community Forest Grant is funding $90 million in Corps programs, and the Corps Network seeks to build a successful corps model for urban forestry career pathways. The Corps Network is skilled at sharing tools with individuals to prepare them for careers; however, these individuals face barriers such as unclear credentialing requirements for certain arboriculture and urban forestry careers. Additionally, there is no clear direction from a specific credential attainment that builds on itself, especially for those seeking a family-sustaining career.

The Corps Network will attempt to bridge the gap between credentialing and careers through national-level arboriculture and urban forestry Corps programs so that more people find careers in the sector.

PERSPECTIVES FROM PARTICIPANTS:

There may be limited examples of the corps model being used in urban forestry and arboriculture, but there will be many more with recent funding support.

The corps model is a great way to solve the "I can't get a job without experience, but I can't get experience without a job" challenge.

Finding appropriate partner organizations will be key to success in applying the model in urban forestry.

There will be a need for technical training and education with these efforts.

The corps model is a great way to engage with and include a more diverse population in urban and community forestry.

The Corps Network has resources for organizations that want to launch a Corps.

CREDENTIALING PATHWAYS

Jamie King
Urban and Community Forestry Society (previously known as Society of Municipal Arborists) board member, Urban Forest Manager, and University Arborist at Virginia Tech

The Urban Forestry Academy at Virginia Tech teaches the student body basic urban and community forestry skills. Jamie also works with the ISA Credentialing Council and the Mid-Atlantic Chapter of ISA (MAC-ISA). Jamie first joined the workforce as a summer intern under the mentorship of Eric Wiseman. His interest in arboriculture continued with increasing responsibilities and incentives to gain credentials. Mentorship helps introduce people to arboriculture and urban forestry, and credentials can create opportunities to evolve those interests into careers.

This pathway presents a challenge: no official track for obtaining credentials exists. Individuals must be inclined to take opportunities, as in Jamie's experience. A benefit of credentialing is that professionals can better communicate their specializations with their clients and stakeholders. Encouraging mentorship relationships, interconnecting communities, and promoting credentialing can help professionals find support and work with one another to address gaps in the workforce.

PERSPECTIVES FROM PARTICIPANTS:

Translating materials (e.g., outreach, resources, forms, and exams) into other languages is key to opening doors for new members of the workforce. A growing role for organizations is to encourage employers to provide materials in other languages.

There is a need to consider the words that the industry uses to describe the field/profession. For example, in other countries, arboriculture and urban forestry careers fall under the engineering category or are described as "green solutions" and "nature-based solutions."

Defining arboriculture careers is challenging: Is it all in the name or in our work?

K-12 OUTREACH

Holly Campbell
Public Service Assistant at University of Georgia, Warnell School of Forestry and Natural Resources

The Warnell School of Forestry and Natural Resources at the University of Georgia offers a community forestry and arboriculture four-year degree program. Recruitment to this degree program has been challenging. Parents are extremely influential in their kids' careers, and they do not yet see a clear career path for their children by pursuing a degree in forestry. The University of Georgia is looking for new avenues to recruit and engage high school students and, as part of this effort, has been conducting a survey of established youth programs around the United States that focus on arboriculture and urban forestry. The survey's focus is on programs geared towards youths 10 to 19 years old, a period when young people are just beginning to think about their careers. Holly Campbell has been working on organizing this database of programs in partnership with ISA and with funding from the US Forest Service.

The next generation workforce will be built from the myriad of students already interested in environmental stewardship, learning about the value of trees and their benefits to urban and suburban areas, and finding better ways to manage natural resources. The growing interest in youth is an opportunity for the industry to reach out through primary, secondary, and postsecondary education programs.

To create the database, Holly reached out to 100 programs, with 60 respondents, to understand those programs' offerings (e.g., dual enrollment programs and paid internships) and see the impact on careers in arboriculture. One observation from the survey so far is that hands-on experiences lead to careers and post-secondary education within the field. Holly will use the results of the survey to convene stakeholders and identify gaps in the current program offerings. The result will be a final report for ISA that is prepared by the end of 2023.

PERSPECTIVES FROM PARTICIPANTS:

There is difficulty accessing people with interest and the skill set for small organizations that do not have a lot of capacity. Instilling a love for trees is important to develop at a young age. Seeing people newly interested in tree biology and care is a positive sign.

There is an opportunity to set up four-month-long training for people from arboriculture youth programs, primarily underserved youth communities.

A lot of energy is required to retain volunteers, sustain interest, and grow a cohort of people who appreciate trees.

NOTES:

↘ PRIORITIZATION:
CURRENT WORKFORCE CHALLENGES

Workshop participants reviewed the 2018 Industry Workforce Summit challenges and then decided which of those challenges were similar or different five years later, in 2023. Participants engaged in a prioritization polling exercise. Their responses are shown in the table on the opposing page.

CHALLENGES TO DEVELOPING AN URBAN FORESTRY AND ARBORICULTURE WORKFORCE IN 2023*

**Prioritized According to Votes by Participants*

↘ DIGGING DEEPER:

THE TOP FOUR CHALLENGES AND WORKFORCE OPPORTUNITIES

Workshop participants broke out into group discussions focused on each of the top four challenges outlined in the prioritization poll. Based on their experience, participants outlined opportunities for addressing these challenges.

- ARBORICULTURE AND URBAN FORESTRY ARE NOT VIEWED AS A CAREER
- LACK OF CLARITY ABOUT THE REQUIREMENTS FOR ENTRY
- THE LACK OF DIVERSITY AND INCLUSION WITHIN THE INDUSTRY
- YOUTHS AND THE GENERAL POPULATION ARE UNAWARE OF THE PROFESSION

ARBORICULTURE AND URBAN FORESTRY ARE NOT VIEWED AS A CAREER

- There is an opportunity to campaign nationally to reach students in grades 10 and 11 and develop better roadmaps and career guidance in schools.
- The industry could lobby the government to fund awareness programs and support organizational budgets.

LACK OF CLARITY ABOUT THE REQUIREMENTS FOR ENTRY

- The sector lacks clarity for entry requirements due to the differences in the expectations of employers and employees.
- The industry needs to define a universal language around skills, salaries, and career pathway hierarchies and communicate them to the workforce. This standardization of salaries and job descriptions should be widespread.
- There are current trainings that improperly prepare students for work in the field. Additionally, the quality of education received from post-secondary education is low compared to “boots-on-the-ground” work experience. Educational programs could better prepare the future workforce for the realities of this type of work.

YOUTHS AND THE GENERAL POPULATION ARE UNAWARE OF THE PROFESSION

- Arboriculture has not been perceived as a skilled trade or a “successful career” (e.g., lawyer/doctor).
- To reverse this perception about the industry, it is important to access two points of contact in particular:
  - educators and career counselors who interact with youth, and
  - the parents who support their children’s career choices.
- The industry needs to offer transparent pay disclosure to future employees. The industry should define pay ranges, expectations, and salary discrepancies across the nation.
- Industry employers should invest in their personnel’s soft skills to better retain their existing workforce and to more successfully recruit new people.
- The industry could do a better job of articulating career pathways so that once individuals know about arboriculture and urban forestry, they can easily explore the wide range of careers.

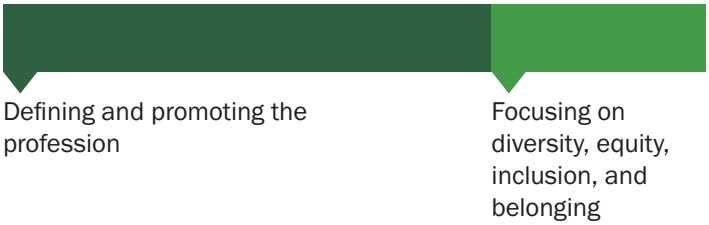
THE LACK OF DIVERSITY AND INCLUSION WITHIN THE INDUSTRY

- The power of an individual seeing themselves in a career path by looking at similar mentors and existing role models in the industry will be an important way to diversify the sector.
- Culture changes by telling stories. Industry employers could host programming events that tell people’s stories to show diverse experiences, build a sense of commonality among future workforce members, and encourage new faces into the field.
- Language is instrumental in communication across the sector. The major industry groups could develop an inclusive language guide or standard legal guidelines for use across the industry. The industry could overcome language barriers by creating a culture based on multiple languages, and employers could post jobs in non-traditional venues to recruit a non-traditional arboriculture and urban forestry workforce.
- Psychological safety is a precursor to physical safety. Some applicants look at job announcements, which are wish lists versus requirements, and immediately decide not to apply.
- There is a conflation of degree-based positions and entry-level positions, the former of which is more based on technical skills. This dynamic leads to misunderstandings between employers and entry-level individuals who have different job and pay expectations.
- The industry could better understand how power dynamics play into the workforce with the following consideration: Power is not taken; it is given.

LOOKING FORWARD: KEY TAKEAWAYS AND CLOSING THOUGHTS

Before concluding, participants came back to the general session to highlight key takeaways and synthesize closing thoughts.

THE TOP FOUR CHALLENGES ARE TIGHTLY CONNECTED



The top four challenges prioritized in the summit fit into two broad categories:

DEFINING AND PROMOTING THE PROFESSION ADDRESSES:

01

- Arboriculture and urban forestry not viewed as a career
- Youth and the general population unaware of the profession
- Lack of clarity about the requirements of entry into the industry

FOCUSING ON DIVERSITY, EQUITY, INCLUSION, AND INSTILLING A SENSE OF BELONGING ACROSS THE INDUSTRY ADDRESSES:

02

- Lack of diversity and inclusion

COLLABORATION OVER COMPETITION

- Organizations across the industry are working in parallel; however, there is an opportunity to establish a more united effort and benchmark successes.
- Collaboration within the sector is more important to workforce recruitment and retention at this time than competition.
- Organizations and employers must work together to strengthen this industry. Otherwise, people will continue to look to other industries.
- Competition between employers for talent may hinder collaboration, but one way to address this is to focus instead on expanding the pool of applicants by increasing awareness of the industry and encouraging more people from outside to join.

IMPROVING WORKFORCE RECRUITMENT

- Establish more transparency and consistency regarding salary and job expectations.
- Bridge language and cultural barriers to tap into a new workforce.
- Standardize arboriculture vernacular.
- Increase marketing and lobbying efforts for the arboriculture and urban forestry sector.
- Redefine the meaning of working in this industry (e.g., “getting your hands dirty” versus “touching the earth”) to shift public perception of job prospects and establish legitimacy as a career that offers upward mobility.

GREATER OUTCOMES REQUIRE GREATER EFFORTS

- The top workforce challenges identified in this summit are bigger than one entity; it will take the effort of the entire sector to lead to win-win-win scenarios.
- Industry members should present arboriculture and urban forestry to new and larger audiences by creating engaging and unique events (e.g., kids' tree climbing competitions at city/municipality fairs).
- If the industry does not shift mindsets, the same problems will exist in the next five years.
- The industry needs to include policymakers (e.g., Departments of Education and Labor) and people from communities that make the changes (e.g., key community leaders) in efforts to promote the industry and improve the workforce.

IMPROVING WORKFORCE RETENTION

- Some reasons an employee might accept a job with another employer include psychological safety, feeling pigeonholed, or interest in pay raises.
- An employee might decline a job with another employer because they enjoy the work and prefer it over a larger salary; the individual feels empowered and competent in their position.
- Employers should hold themselves accountable for investing in soft skills, not only hard skills, to keep workforce retention high.

CLOSING REMARKS

Caitlyn Pollihan, ISA, thanked workshop participants for their contributions and Paul Johnson, SFI, reiterated SFI's commitment to defining career pathways and developing clearer roadmaps. The hosts further clarified how their organizations will follow up with next steps and future opportunities.

NEXT STEPS

FUTURE OPPORTUNITIES

- The outcomes of this workforce summit will set the foundation for addressing the workforce challenges that the industry is facing.
- Continued dialogue is important for the entire sector. Coming together again to discuss challenges and opportunities will be instrumental to ensuring continued industry alignment, bridging gaps, and connecting industry voices to government agencies and organizations that can help.

International Society of Arboriculture

SUSTAINABLE FORESTRY INITIATIVE
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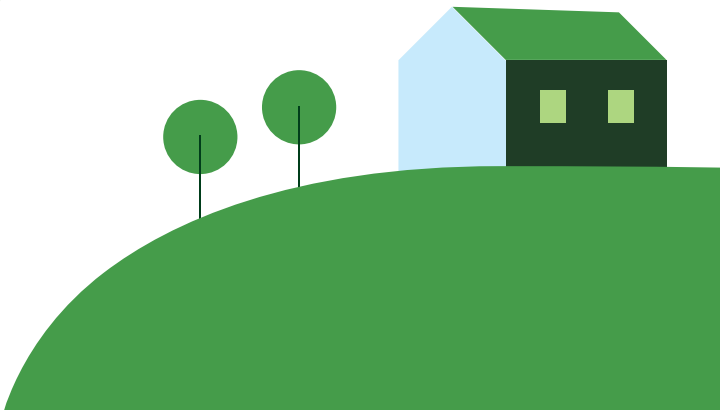
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