SCIENCE AND RESEARCH COMMITTEE NEWS

Growing Arboriculture and Urban Forestry: One Student at a Time

By Rich Hauer, Jess Vogt, and Burnell C. Fischer

"Do you have any students you can send our way?"

If there were a nickel for every time that statement was made, the annual tuition and housing for several students could likely be met. This hypothetical serves to illustrate a common problem employers have today: a lack of qualified and interested people to fill jobs in arboriculture and urban forestry.

Why does this challenge exist? What are some approaches that can be taken to encourage both student and early-career professionals to explore arboriculture and urban forestry? What does the future hold for people entering this field? If fostering the next generation of arborists and greenspace managers is of interest to you, read on.

ISA Student Committee and Outcomes Over the Past Four Years

Approximately four years ago, the International Society of Arboriculture (ISA) formed a student subcommittee. The committee is officially structured within the ISA Membership Committee. The mission is simple: grow

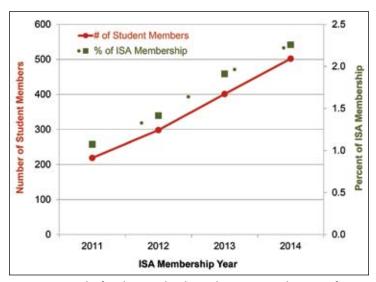


Figure 1. Growth of student membership in the International Society of Arboriculture.

arboriculture and urban forestry one student at a time. You probably have heard the ISA mission that ISA Executive Director Jim Skiera often and clearly communicates: to make the world a better place one tree at a time. Finding qualified people to make the ISA mission happen is needed now more than ever.

Several neat things have happened since October 2011 (when the subcommittee first met). Student membership has more than doubled from approximately 200 to 500 (Figure 1). How did that happen? In simple terms, we identified a huge barrier to student membership and reversed that barrier. Just a few years ago, student members joined ISA by filling out the membership form, getting an advisor signature, and sending a copy of a current student registration or ID card. Sounds simple enough. However, miss one of the required documents and the ISA membership department would have to get in touch with the student to collect any missing information. And this happened too often. Some students would make it through the process and eventually become an ISA student member. Membership to ISA was also bundled with membership to a local chapter. The one-stop shopping idea made sense, but in practice, the logistics became burdensome to students and the verification requirements costly for ISA to implement.

The student subcommittee "arborstormed" (aka brainstorming to make the world better one tree at a time) and developed a new idea for student membership: join a local chapter as a student member and become an ISA member automatically. As of 2012, students can join the ISA Ohio Chapter, join the ISA Germany Chapter, become a student member of the ISA New Zealand Chapter, or any chapter for that matter, and also become an ISA student member. Thus, rather than ISA students becoming local chapter members via ISA headquarters—which involved staff sending notice of a new student member and giving the chapter USD \$15 per student—the process was reversed and streamlined. Join the local chapter at the chapter membership rate and the information moves upward to ISA headquarters. The idea was

Figure 2. Students, mentors, and industry leaders assemble at the 2013 ISA Annual International Conference & Trade Show (Toronto, Ontario, Canada).



formulated in a proposal to the ISA Board of Directors who voted to plant this seed and let the idea grow.

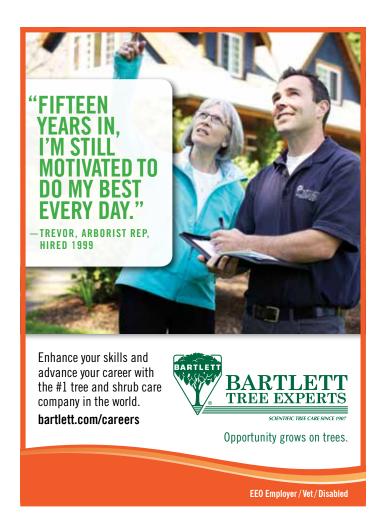
Did it work? Using the student numbers as a gauge, certainly. Student members more than doubled in less than four years (Figure 1).

Collaboration with all ISA Professional Affiliations (PAs) further strengthened student access to arboriculture and urban forestry components and what to expect from different sector jobs. The Arboricultural Research and Education Academy (AREA) was the first PA to develop a policy that an ISA student member also automatically becomes an AREA member. All PAs (e.g., Society of Commercial Arboriculture, Utility Arborist Association, and Society of Municipal Arborists) now do the same.

Another metric is student attendance at the annual conference and trade show. Did you know there were zero undergraduates, and only a few graduate students, who attended the 2010 ISA Annual Conference? Given that ISA is the professional society for our field, and students are important to the future of the field, this had to change. As part of the formation of the student subcommittee in 2011, a set of student-specific events was developed for the 2012 annual conference in Portland, Oregon, U.S. Activities at the International Tree Climbing Championship (ITCC), a pre-opening reception, a luncheon with mentors, a student networking session, and great educational sessions led to more than 40 students attending. An additional cohort of 15 high school students attended the field activities at the ITCC.

Student involvement and attendance at annual conferences has continued to grow (Figure 2). The most recent, 2015 Annual International Conference & Trade Show (Orlando, Florida, U.S.) involved a Student Ambassador Program. Five students out of nearly 100 applicants were selected to provide their insight into the student conference experience through interviews and a focus group. They provided a student perspective on barriers to attendance, expectations of the conference experience, and

other key information, such as why students would come to a conference. Not surprisingly, we learned that networking with peers and professionals, educational opportunities, and finding jobs are key reasons to attend. Cost to attend and lost summer employment earnings were barriers.



The excitement and optimism the Student Ambassadors expressed about their field of study was gratifying to observe.

Arboricultural and Urban Forestry Compensation

One question expressed by the 2015 Student Ambassadors concerned was how much a person can earn in this profession.

Business 101 says that if a customer does not know about your product, they are unlikely to be your customer. Furthermore, if the message is incorrect or depicts an

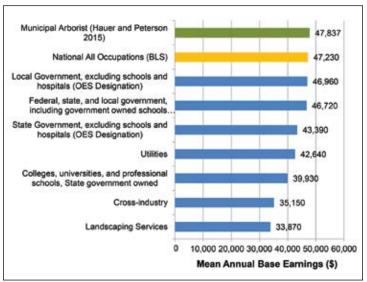


Figure 3. Mean annual base pay for arborists in private and public sector jobs (data from Bureau of Labor Statistics from 2014 and a study of municipal tree care and management in 2014, by Hauer and Peterson 2015).



Figure 4. Mean annual base pay for various municipal government tree care positions. (BLS is the Bureau of Labor Statistics; National All Occupations includes all job in the U.S.; Other includes various self-reported jobs, such as assistant city forester, supervisor, horticulture manager, tree inspector, utility forester, and district foreman.)

undesirable outcome—good luck on making the sale.

An unfortunate perception exists that working with trees and urban forests is a low-paying field. This notion, inaccurate and often repeated, needs to change. As you likely know, this is not the case. As in any field, there is a wide range of income and career potential in arboriculture and urban forestry, especially as a person gains knowledge, skills, and abilities, and further climbs the tree-care job ladder. It is quite possible for a person to make a six-figure income in this profession as a consulting sales arborist or urban forestry manager. In some extreme cases, seven figure incomes are earned for select, high-achieving people in key locations. Become the best, learn how to communicate, and provide people a service by marketing/managing tree work to meet a client's needs, and you can make an excellent living.

For a student or other person interested in entering arboriculture and urban forestry, what level pay can you expect in either the public or private sector? A recent study by the authors (Hauer and Peterson 2015) found that as you climb the career ladder of arboricultural and urban forestry jobs in the United States, the pay soon equals and exceeds the national average for all occupations (Figure 3).

"Meet and exceed the national income average for all jobs as documented by the Bureau of Labor Statistics!" should be the tagline we market to anyone considering entering our field. In the U.S., persons employed as municipal arborists make on average \$47,837 annually, compared to the national average of \$47,230 for all occupations (Figure 4). The occupations and salaries listed in Figure 3 illustrate that a working firefighter (\$52,483), urban forestry inspector (\$56,058), a city forester/urban forestry manager (\$71,219), and other arboriculture and urban forestry occupations are more than merely endsmeet jobs; these are careers with comfortable salaries.

Working as a volunteer coordinator, a production arborist, utility vegetation manager, forestry operations inspector, consulting arborist, technical services coordinator, regional manager, and more—are all rewarding careers that a student and early-career professional can look forward to securing. Entry-level pay is soon built upon with demonstrated knowledge and credentials earned: ISA Certified Arborist®, Commercial Drivers' License, or Pesticide Applicators License. Together, these three credentials can easily be translated into a \$4,000 to \$6,000 annual pay increase at a private firm. Bonuses for reaching and exceeding production goals also add to the annual baselevel compensation. But perhaps most importantly, jobs in arboriculture and urban forestry are careers we can be happy in, and are fields that offer meaningful work that contributes to a better, greener world.

What Does the Future Hold?

Good things are happening and all indications point to a vibrant future for people who foster the urban forest, whether one tree at a time or at the population level. However, the field needs committed people. Many educators report that there are not enough interested students entering urban forestry and arboriculture programs at places of higher education, and some programs are even closing. Some traditional forestry and horticulture programs are reshaping their degrees and concentrations in urban forestry and arboriculture. For example, some traditional schools of forestry have rebranded as a school of environmental science. The challenge for the tree care profession will be to connect to these reorganized traditional schools, as well as to broader, more interdisciplinary educational programs that might not be connected to ISA or to local chapters.

A recent survey of educational institutions by the authors indicated that over one-third (36%) of 116 responding institutions have only a single course in arboriculture and/or urban forestry, and 29% of those surveyed had no named degree or concentration relating to the field (Vogt et al. 2015). Students without a named degree or concentration in arboriculture or urban forestry might be lacking key classes, maybe in arboriculture, greenspace management, plant selection and identification, pest management, and/or some other key ability.

One strategy enabling greater student engagement is in finding ways to overcome what might be a limited deficiency and educate students about the endless possibilities of this profession. Let's together—educators and professionals—overcome any challenges and efficiently engage students in ISA activities and recruit large populations of students into the field. For instance, local ISA Chapters should reach out to local university and technical college students and invite them to meetings and events so they can engage with professionals at a local level.

Join the exciting field of arboriculture and urban forestry. There are many different jobs, and the employee pay for many early-career jobs soon meet (and mid-career jobs exceed) the national average for all occupations. Selling these taglines and welcoming in new students and early-career professionals is what the future holds. The present is gratifying. The future holds promise of even better things to come. But it will require more creative means of engagement between students, their educational programs, and the profession.

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Rich Hauer is a professor of Urban Forestry with the College of Natural Resources at the University of Wisconsin—Stevens Point.

Jess Vogt is an assistant professor in the Department of Environmental Science and Studies in the College of Science and Health at DePaul University (Chicago, Illinois, U.S.). Burnell C. Fischer is a clinical professor emeritus at the School of Public and Environmental Affairs at Indiana

University, Bloomington.

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