Short Talks
2019 Arboriculture & Urban Forestry Educators' Symposium & Summit

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TALK ABSTRACTS

John Ball (john.ball@sdstate.edu), Professor of Forestry, Department of Agronomy, Horticulture and Plant Science, South Dakota State University, Brookings, SD
Additional contributor: Sharon Jean-Philippe, University of Tennessee, Knoxville, TN
What the tree care profession wants and what we teach: is there a disconnect?
Arboriculture and urban forestry courses are offered throughout the country but these are often taught by a faculty member responsible for other courses in agronomy, forestry or horticulture. Too often these individuals have little or no connect to the profession. This short talk will cover a survey we made to tree care companies and city forestry departments around the country as to skills and knowledge they wanted in new hires from 2- and 4-year schools and a companion survey that was sent to instructors of arboriculture and urban forestry courses at 2- and 4-year schools regard the topics covered in their courses. The results show that there are gaps in what we teach and what the profession desires.

Katrina Van Osch-Saxon (katrina.van_osch-saxon@flemingcollege.ca), Faculty-Urban Forestry, Fleming College-School of Environmental and Natural Resource Sciences, Lindsay, Ontario, Canada
Women in Trees: A collaborative approach to recruiting young women for a career in trees
This talk will share the story of the presenter's dream of bringing together a group of 100 women to motivate and encourage young women to consider a career working with trees. We identified a need to engage young women to enter our underrepresented industries in Urban Forestry, Forestry and Arboriculture. We held our first WIT event in 2016 which was a resounding success and in 2017 we surpassed 120 attendees. In 2019, we are taking a different approach, where students in our second year Urban Forestry Technician diploma program will present 2 hour workshops under the supervision of staff mentors to the attendees. The workshop fulfills a community engagement and education learning outcome in their Trees, People and Community course. Workshop topics include Basic Tree Climbing, Tree Identification & Arboretum walk, Trees & Technology, Chainsaw Basics and Urban Lumber & Sawmilling. This event is a collaborative process bringing together our marketing department, student group, industry partners, staff members (workshop mentors), administration, members of the community and most importantly interested women in our industries from across Ontario. The most exciting part of this experience is to watch our students engage others using all of the skills and information they have

gained through their time at Fleming. The presentation will also include a video produced following the events.

Burney Fischer (bufische@indiana.edu), Clinical Professor Emeritus of Public and Environmental Affairs, School of Public and Environmental Affairs, Indiana University Bloomington, Bloomington, IN

Teaching Urban Forestry Management at a Non-Forestry School: An opportunity to expand the profession

This presentation will highlight urban forestry instruction at Indiana University's School of Public and Environmental Affairs (SPEA). Students in non-forestry school programs such as environmental science, environmental sustainability, environmental management, etc., can become interested through a single urban forestry course. The student perspective is quite different from the traditional forestry school. Students are much less interested in how to do arboricultural things (climb trees, use equipment) or think of the urban forest as discrete forest stands. Instead, they think about the urban ecosystem, how it functions as a social-ecological system and divide the city into urban patches (neighborhoods, etc.) rather than forest stands. On the other hand, forestry students understand measuring trees and forest inventory while non-forestry students need dedicated instruction and field experience. Non-forestry students appear more likely to look for urban-based volunteer opportunities, internships and full-time employment in a broad range of urban greening activities rather than just arboriculture. They are oriented more towards urban greening non-profits and ecologically based consulting. As an instructor, I focus on a different set of topics and opportunities than at a forestry school. Case studies with non-profits, research projects for a city, ecosystem services discussions, etc., become more the norm. While traditional forestry schools have low enrollments in urban forestry and strategize to attract students, non-forestry school programs such as SPEA routinely have large class sizes (~40) taking urban forestry. Finally, in addition to directly benefiting the urban forestry profession with a new and different type of urban forester, these students will create a future a pool of knowledgeable citizen volunteers and supporters.

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Additional contributors: Sophie Nitoslawski

Teaching Assistants in Urban Forest Education

In autumn of 2015, the University of British Columbia (UBC) launched Canada's first Bachelor of Urban Forestry program. Since then, the program has grown to nearly 200 students, hailing from many different countries. With a relatively small initial teaching staff, teaching assistants (TAs) have become indispensable and ensure that the teaching needs of students are met. TAs play an important role in educational institutions, and represent various levels of experience and education, from undergraduate to PhD candidates. At UBC, TAs serve as course markers, facilitators, and instructors. Students who act as TAs hone skills in teaching, logistical planning, and interpersonal communication, while alleviating responsibility of the professors, allowing for more focused teaching. Perspectives of two current UBC TAs will be shared detailing various types of TAs, their role in the classroom, and their importance to a successful educational experience in urban forestry.

Meghan Bowe (meghanlbowe@gmail.com), Projects Coordinator Consultant, Environmental Education Association of Illinois, Poplar Grove, IL

Pathways to Green Careers Start with STEM

STEM initiatives encompass hard and soft skillsets. Join us to explore 10 STEM skills that support pathways to green careers. Leave with ready-to-implement classroom tools. Simply put, a green job is one that supports or restores the environment, and thus contributes to a more sustainable world. In this

session, participants will explore 10 STEM skills that support green career pathways. The 4 essential STEM discipline areas encompass a wide variety of both hard and soft skills. Participants will become acquainted with 10 unique STEM skills and conduct a self-assessment by rating themselves on a 10-point scale for each. In addition, participants will: 1) explore personality tests to help students determine what types of green jobs might be good for them; 2) review Natural Inquirer's free Scientist Cards, which describe real-life scientists and engineers; 3) explore various green job boards, which list student-centered job openings, internships, and volunteering opportunities in green careers; 4) receive complimentary copies of the Green Jobs in Green Spaces toolkit, which provides participants with hands-on experience actively exploring green jobs; and 5) take home a copy of the "Ten STEM Skills for Everyone" self-assessment worksheet. As teachers, our goal is to use green careers to not only teach STEM skills-- but also excite youth about future employment opportunities in a green economy. We hope you will join us, and leave empowered to implement the tools we share.

Kamran Abdollahi (kamran_abdollahi@subr.edu), Professor & Program Leader, Urban Forestry & Natural Resources, Southern University, Baton Rouge, LA
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Enhancing Urban Forestry & Arboriculture Education and Research through Partnerships
This presentation will provide the summary results of a 10-year assessment of quantitative outcomes and impacts of series of successful urban forestry & arboricultural education and research initiatives that were implemented at Southern University in Louisiana through partnerships with industrial, private, federal, state and nonprofit organizations. The emphasis is on enhancing urban forestry and arboricultural education and research deliverables through innovative science and technology platforms. Student learning outcome assessment at the program level will be discussed and several recommendations will be provided based on the results of a comprehensive 10-year urban forestry program assessment.

Asia L. Dowtin (dowtinas@msu.edu) Assistant Professor of Urban and Community Forestry, Department of Forestry, Michigan State University, East Lansing, MI
Additional contributors: David Rothstein (Professor, Michigan State University Department of Forestry)
MAPping Pathways to Higher Education through the Urban Forest
For more than three decades, the Michigan State University (MSU) College of Agriculture and Natural Resources (CANR) has coordinated the Multicultural Apprenticeship Program (MAP) as a means by which to recruit undergraduate scholars from racial, ethnic, and gender groups traditionally underrepresented in the natural resources disciplines. In the summer of 2018, MSU Department of Forestry partnered with CANR to welcome a cohort of five MAP participants for a four-week, immersive learning experience designed to introduce students to the principles and practice of forestry within an urban ecosystem. Over the course of the program, we converted a woodlot in urban Lansing, Michigan into an outdoor classroom and laboratory. Students worked with MSU faculty and graduate students to receive instruction and collect data on plant and animal biodiversity, forest inventory, forest hydrology, and human dimensions of urban forestry. The students worked together to synthesize their findings and experience into 1) a presentation for other high-school students, 2) a final presentation for other MAP students, MSU faculty and their families and 3) a final written report. Preliminary review of program outcomes indicates that participation in the MSU Forestry MAP cohort impacted students' decision-making processes with respect to identification of a preferred degree program and institution of collegiate-level studies. Program participants indicated that their awareness of academic and career opportunities in forestry and related disciplines, in addition to intention to pursue such opportunities, had deepened following their MSU Forestry MAP experience. Subsequently, one of the three graduating seniors from the 2018 cohort has elected to pursue a Forestry B.S. at MSU beginning in the 2019-2020 academic year, while all students have since served as ambassadors for MAP and MSU Forestry to their

peers. Lessons learned from various stages of program development, implementation, and adjustment of attainable outcomes will be explored in this presentation.

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and
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Helping Adult Learners Become Better Stewards of their Backyard Woods- Virtually!

Vermont's forest ownership demographics are changing in important ways, with significant implications for the size and integrity of our forests: the number of landowners is increasing, the size of the parcels is decreasing, and the age of owners is increasing. These changes bring new pressures on the forests of Vermont and on our educational and technical assistance programs. To engage this transitioning audience as stewards of Vermont's changing forests, the Vermont Urban & Community Forestry Program, a partnership between University of Vermont Extension and Vermont Department of Forests, Parks and Recreation, developed the VT Backyard Woods Program, a hybrid course for homeowners with less than 25 acres. Participants of the program learn more about the woods in their backyard – what's in it, who (wildlife) uses it, and how they can become better caretakers of it. Participants leave the course having developed an action tailored to their specific property. This presentation will share how Vermont used the 6 core principles of adult learning to design and deliver a learner centered program to over 150 landowners. Learn about course design, delivery and stories of success in this engaging, interactive presentation.