



URBAN FORESTERS, TEACHING



"Teaching at MFI is mostly about sharing what I've experienced and how those experiences can help my colleagues so maybe they don't have to trip over the same things that I did. I've always enjoyed how teaching keeps me involved in the industry as well as in touch with other people around the country. Every year I learn so much from the people that attend." —Walt Warriner, City of Santa Monica (ret.)

Early in my career I realized that education is a critical function of the urban forestry profession. As the natural resource manager for the Cincinnati Park Board, I know that educating citizens, contractors, and politicians is a major component of program success. Trees are vital to our communities and yet they are widely misunderstood and underappreciated. Educating people about the value and benefits of trees became a natural extension of my professional role.

The University of Cincinnati is the second largest university in Ohio and its College of Design, Art, Architecture, Art and Planning houses the Horticulture Department. I have been an adjunct professor for 15 years, teaching a class on urban forestry, and have enjoyed every minute of it. It is a fun side job that has made me a better manager, communicator, and professional by keeping my skills sharp, improving my knowledge base, and continuing to learn from students and other faculty.

Being an adjunct isn't for everyone. You can't just step into a phone booth as Clark Kent and come out dressed in a tweed jacket as Professor Kent. It is a lot of hard work and the pay is much less than full time professors, usually with no benefits. It requires time management, organizational, and communication skills that I needed to improve to be successful. My course requires a class project that encourages community involvement such as planting trees, developing reforestation plans for parks, or establishing a wetland. I also give extra credit for students who volunteer for environmental restoration or beautification projects.

Educating and mentoring students can be very rewarding and is an excellent way to serve the community.

—*Dave Gamstetter, Natural Resource Manager, Cincinnati Park Board, Cincinnati, Ohio*

I also learned early in my career as an urban forester that if I wanted to be successful, I needed to be a teacher. Too many of the people I dealt with didn't understand or appreciate trees, and urban forestry seemed like an oxymoron to far too many people. The green industry people I met often meant well, but many of them lacked practical urban forestry knowledge. Hence, I became an educator.

I began by teaching courses for my local ISA chapter, state urban forestry council, and eventually SMA. After 20 years teaching adults, I was invited by Oregon State University (OSU) to become an affiliate faculty member and make occasional guest lectures in forestry and horticulture courses. A couple of successful one-credit seminar courses followed, and eventually I was asked to develop an online introductory urban forestry course for OSU's Extended Campus (or Ecampus) program. That led to an advanced urban forest planning policy and management class and an arboriculture class—again online. Today, we offer a BS in Natural Resources with an Urban Forest Landscapes option—with all courses online.

In the past four years I've taught almost 300 students in most U.S. states and Canadian provinces as well as students in Scotland, Brazil, Ecuador, the Bahamas, Puerto Rico, Taiwan, and even a U.S. soldier stationed in Afghanistan. I suppose I was as skeptical as anyone at first when thinking about offering entire college courses

at a distance, but the enthusiasm of my students soon got me hooked. Teaching online course has made me a better teacher, and my student discussions are actually more robust online than they were in my classroom. OSU's Professional and Non-Credit Education section will eventually be launching some online urban forestry courses for continuing education credit as well. Now I'm teaching a full 25% of my work time.

Learning online takes a different type of self-discipline. Students must have a certain amount of computer literacy, but more important they need an intellectual curiosity coupled with a motivated attitude to see a course through from start to finish in 10 weeks. Online education is growing at a phenomenal rate—17% per year, compared with only 2% in the resident instruction setting. One in four college students today has taken an online course. And distance educational delivery is a

great equalizer—it extends access to higher education to people in remote locations or to those who have full-time jobs they can't leave to attend college.

My students are quite diverse—some are finishing a degree they started years ago, while others have migrated into urban forestry from some other job area and are using my courses to strengthen their credentials. For a few, my course has been their employee orientation to an urban forestry position!

Given the pace of technological change in our society, it is only natural that learning would move online. Urban forestry is no exception—and I expect to see more and more online urban forestry education opportunities in the years to come.

—Paul D. Ries, Instructor & Extension Specialist – Urban Forestry, Oregon State University College of Forestry



Teaching a practical class like arboriculture can be challenging when you can't just take the students out and show them how to plant a tree—so instructors like Paul Ries (left) often videotape demonstrations and post them online for his Ecampus students. Photo by Tyler Roth



Clockwise starting from seated center: Robin Luker (private arborist), Mark Torok (State of Florida), Dave Schanck, Jason Atkinson (City of Miami Beach) and Tim Hodgins (private business owner). These arborists attended a class on ANSI A-300 standards taught by Bob Brennan at Viscaya Garden in Miami, Florida.

I started a small group with a few friends to earn CEUs in a more cost-effective way: “You teach one class, I teach one class ...” etc. Three years later and it’s grown into something more formal. I bring in speakers, teach a class, record and file for CEUs, do all the scheduling myself. I teach because I find that the need for education is great; local arborists need basic instruction in the ANSI standards, for example, and sometimes city employees need basic training in arboriculture. I teach because I enjoy sharing tree knowledge and doing it well. I tell other would-be teachers, “You must be willing to work late and at home, and you’ll definitely be skipping the stop at the local watering hole.”

Is it worth it? There are many of my students and peers who have gained knowledge and CEUS from my class, and with whom I am glad to have spent time. Gathering arborists can be like herding cats—both have strong wills and bodies and are confident and self-assured. Sometimes arborists think they know everything already, so a teacher has to have sufficient excitement and enthusiasm to keep a sense of humor about egos flaring up from time to time.

I never thought about what I was giving up but what I was giving and what society was to gain: longer living, more healthy trees. I do give up much TV time to be in front of the computer writing and putting together presentations, communications, and readings to be well prepared. My wife complains that I do not watch enough movies with her, but she has really been very understanding.

— *Bob Brennan, Arborist at Fairchild Tropical Botanical Garden, President of Brennan Consulting Inc., President of the Tropical Arborist Guild*

I remember seeing a study done years ago where college students were shown the 1957 BBC Spaghetti Tree Hoax as a “documentary.” The film, which you can see on YouTube, demonstrates the harvesting of spaghetti pasta from trees. The students took the film as fact without question. Months later in an unrelated class they were asked on a quiz how spaghetti pasta was made. An overwhelming majority wrote it was harvested from trees. The study’s author was demonstrat-

ing a point that information presented from a “credible source” may not always be true.

Years later, human nature has not changed. However ludicrous the message, the audience will believe it if the presenter has their trust or respect. As municipal arborists we are constantly fighting misconceptions such as the tap root, curing oak wilt with a foliar spray or lava sand, or the belief that adventitious roots will keep a tree alive under a foot of fill. Some erroneous beliefs are left over from outdated practices, while others are propagated by those selling a product or book. Those hardest to dispel are beliefs presented as fact by well meaning professionals who think observation is the equivalent of years of research.

Whether we are teaching students, volunteers, peers, or interest groups, our position gives us instant credibility, so we have a responsibility to check our facts. When we present an opinion unsupported by scientific study or information based on personal observation and hypothesis, we should acknowledge it as such.

When designing a presentation, we should use trustworthy reference material, and try to acquire the most recent addition. An example would be Harris, Clark, and Matheny’s text, *Arboriculture*. They do an excellent job of citing studies, including those that are contradictory. You may also check USDA Forest Service publications or your local Forest Service. ANSI standards or the supporting BMPs are excellent source material.

— Melinda Adams, City Forester, City of Fort Worth, Texas

With my primary background being landscape architecture, I have long understood the general lack of tree knowledge of those whose job it is to design with trees and other plant material. So, I was intrigued by the prospect, a while back, of serving as an adjunct professor in the College of Design at Louisiana State University. Thinking I might just be able to inject a bit of insight into the curriculum, I approached my director, who approved the two-day-per-week class schedule.

Because I held a full time-city position as urban forestry and landscape manager, I was forced to adopt a flex schedule to accommodate the teaching gig while maintaining my requisite 40-hour week. This meant that I had to make up the teaching hours by starting work (very) early and leaving late on the days I did not teach.

On balance, I found the experience rewarding. It was great working with the students who were eager to learn and have become, I humbly believe, better landscape architects because of their wider-than-average viewpoint. On the other hand, the pay as an adjunct hardly made up for the extra hours and difficulty of being away from the office for several hours a week. Having originally thought the job would be similar to preparing presentations and public speaking, I soon found out otherwise. Preparation was critical, and even then the limitless range of students’ questions was often confounding. I will say that I did learn much from the experience myself, including better management skills, a refreshed and reinvigorated creative mind, and an appreciation for teachers in general.



Steve Shurtz brings both landscape architecture and urban forestry perspectives to bear on his MFI teaching.

Since 2010 I have become an active member of the teaching cadre for the Municipal Forestry Institute (MFI). Having been an original cadre member in 2005, when the MFI was created, but prevented from participation by Hurricane Katrina, I was eager to actually experience the full week-long institute. I always knew the idea was great, but what a teaching experience!

MFI is a highly intense and comprehensive series of lectures and exercises designed to teach municipal and urban forestry professionals all of the non-tree-related things those folks need to be effective in their jobs. The teaching experience, while similar in some ways to college teaching, differs greatly in that the class is comprised of people already embarked upon their careers, but they are being forced out of their comfort zones and

made to face and adapt to things they may not do well or even want to do at all.

Public speaking, managing for change, politics, visioning, and personnel matters make many of us uncomfortable, but they remain important skills to develop and have little or nothing to do with trees (our admitted passion). Teaching professionals to recognize, learn, and adapt such skills to their unique positions requires a frightening degree of adaptability, flexibility, and general knowledge. In the words of MFI's chief curriculum developer Paul Ries, "*Semper Gumby!*" (Latin for "*remain flexible*").

Teaching is a great way to sharpen one's mind and professional skills, but more importantly, it's a way to give back to our profession by sharing our hard-won knowledge with the next generation of professionals who'll be following in your footsteps, leaving them free to advance the knowledge base even further and continue to improve the world we leave behind.

-Steve Shurtz, Urban Forestry & Landscape Manager, Baton Rouge, Louisiana

Teaching in TAFE [Technical and Further Education, the largest vocational and training operation in South Australia] has helped me focus on particular topics that I would not necessarily be able to in my regular duties. My local government position—like most, I would assume—is diverse and there are not very many opportunities to spend time on one subject, so researching and delivering a topic for TAFE was a great experience and helpful in my working role at Lismore City Council.

The challenges mostly revolve around finding time—researching topics and developing presentations was difficult during normal working hours. When you have not taught before, starting from scratch is very difficult. Preparation time is much more manageable if one is teaching the subject year after year. My weekends were sacrificed at first, until the preparation was completed. Then it was just the day of teaching. I was lucky in that my work allowed me to take my RDO (rostered day off) every second week as a half day every Friday.

Overall, it was a worthwhile experience and something that if I could spend more time in, I would get more experienced and proficient at.

—Martin Soutar, Parks Coordinator, Lismore City Council, New South Wales, Australia



Tom Munn and Kent Roosevelt High School Urban Forestry students. "Industry needs students as much as students need professional mentors," Munn says. Photo Courtesy City of Hudson, Ohio

The economic downturn has created reduced budgets, combined duties, and less time to focus on urban forestry activities. As professional managers we need to delineate our core business and core values. My core values include: 1) quick customer service; 2) appropriate ethics; 3) professionalism – using established standards; 4) communication; 5) developing people; and 6) marketing urban forestry value. I believe teaching activities are at the heart of our core business now and to meet future challenges.

Marketing the value of urban forestry needs to be a high priority. If you as the municipal arborist don't sell your program, who will? Typically tree commissions will follow your lead, and good volunteers will take the ball and run with it if we set the right direction and strategy. Regular teaching occurs on the City urban forestry webpage; Cable TV; Arbor Day; Earth Day; Regional ISA / SMA meetings; Rotary lunches, and press releases. Is there something in your City that is unique and a story worth telling? Develop it into a short presentation and volunteer. For Hudson, Ohio, it was our recent urban tree canopy study and how we use it as a planning tool for stormwater quantity and quality. We tie in the urban forest with watershed management and wellhead protection.

A recent SMA conference theme highlighted forming creative partnerships. Any outside talk or presentation with the local high school, university, civic group or governmental agency will pay you back in dividends. For example, our local Soil and Water Conservation District now champions urban forestry for stormwater quantity reduction and stormwater quality for the annual EPA NPDES (Environmental Protection Agency *National Pollutant Discharge Elimination System*) report. I would

consider teaching outside of our “normal” realm as an investment in our futures.

—*Thomas Munn, Public Works Superintendent-Services, City of Hudson, Ohio*

For years I taught arboriculture at Columbus State Community College while holding down my very full-time job as a municipal superintendent of parks & forestry. As the son of two teachers, I found teaching to be very rewarding, but as an adjunct faculty member, the rewards were primarily of the intangible kind.

Our textbook was the ISA's *Arborists' Certification Study Guide*, which I supplemented with more detailed information as needed. I found that it's true that the best way to master a subject is to teach it. My technical skills were never sharper than they were every fall quarter. I loved the probing questions, the philosophical give and take (or editorializing), and the look of sudden enlightenment when a challenging concept suddenly made sense. Stuff I'd known for years took on new meaning and a refreshed sense of importance when it was brand new information for others.

I taught two nights per week, since taking time off during my normal work day was not practical. Students were encouraged to communicate via email so I could respond when time permitted. The College also paid several of the City's other arborists to come in as guest instructors for two tree climbing labs using ropes, saddles, etc.

I was required to get the City attorney's permission to take a second job, but it was not a problem since both were public service and public sector positions, and I limited my teaching to one quarter per year. Because my city position is Fair Labor Standards Act exempt (no overtime) and my hours are sometimes irregular anyhow, I had some flexibility in my schedule to attend occasional faculty meetings etc. as long as the city got its minimum 40 hours/week. I enjoyed the faculty meetings because they provided an insider's view of how another public sector agency (and academia) operated.

Overall, the time commitment was significant, and the juggling was at times stressful. Adjunct faculty members were paid only for classroom contact hours, so all class preparation, grading, etc. was done on my time. I don't recall if I ever tried to calculate my true hourly wage. If I did, my brain deleted the information quickly in the interest of protecting my mental health and my blood pressure. Nevertheless, I am truly happy that I did it, and I still enjoy running into former students at conferences and elsewhere. Teaching is a calling. If you feel the call, I'd encourage you to give it a try. Just don't do it with the idea of paying for that boat or vacation cottage.

—*Steve Cothrel, Superintendent of Parks & Forestry, Upper Arlington, Ohio*

Teaching and Community Forestry: It's All about the Relationships

by Stephanie Miller, Regional Urban Forester Ohio Department of Natural Resources' Division of Forestry

It started with our annual get-togethers. Every spring and fall our six Ohio Department of Natural Resources' (ODNR) Division of Forestry Regional Urban Foresters and coordinator spent a couple of days together reviewing our program and visiting a community or two that had something interesting happening.

A consistent theme kept arising: after a very successful 25 years of providing direct management assistance to Ohio's communities, our towns (large and small) were losing their local expertise to age and retirement. We needed a mechanism to get new or inexperienced Tree Commissioners, staff and elected officials up-to-speed quickly with the necessary tools to manage a community tree program. On top of that, Ohio's communities were preparing for Emerald Ash Borer, which required strategic management. We saw a need, and the Tree Commission Academy (TCA) was born.

From the start, TCA was unlike any other community forestry educational program. Online resources, books, workshops and other publications already covered basic tree care concepts. What Ohio communities needed were the basics on arboriculture, Urban Forestry, working within local government and people skills like marketing, volunteer management and municipal relations. As Alan Siewert, ODNR's Urban Forester in northeast Ohio, said, "The one thing every community in Ohio has in common is they are all different."

We needed to provide communities with practical tools that they could customize at home. The plans were to offer a series of four "years" (freshman through senior) that was flexible and mobile for our Urban Foresters to take on the road, yet planned and well-organized so that every student received the same basic education. Basic computer software was all we needed to develop presentations, class outlines and class management tools; the Internet allowed for easy file sharing and review; and each of our foresters had specialties that they could bring to the curriculum and program development process. This program would have been nearly impossible just a decade earlier.

Our team of urban foresters, each based in a different region of the state, met for two-day work sessions to review each class and its supporting materials. Each work session was complete with a posted set of rules and guidelines, agenda, goals, plenty of food, many laptops and a couple of projectors throwing the presentations on

the walls. Having everyone's participation was critical in hashing through what best met the program goals and the needs of the TCA audience. Our urban foresters spent countless hours preparing the TCA program and curriculum while carrying on our everyday responsibilities. Most important, our families supported us and were extremely patient during this intense three-year period.

ODNR Urban Forester Wendi Van Buren leads an activity for the Ohio Tree Commission Academy.



We rolled out the first classes in 2009 in six different locations. We discovered that these first students were proud to be the “beta” class. They took pride in providing feedback, and we were delighted that they repeatedly noted that TCA was “unique, useful, enlightening, challenging and empowering.” They liked that TCA was custom-made for Ohio, by Ohioans. It addressed their issues, and class time with people from other towns helped students realize that they were not alone. They exchanged ideas and resources. Many stayed in touch outside of class and developed lasting friendships.

TCA culminates in a senior graduation ceremony where each community does a short presentation in front of local dignitaries. Although we initially planned this as a way of celebrating all the work the students dedicated to their TCA experience (and surviving 40 hours with their Regional Urban Forester!), the ceremony ended up being an amazing Urban Forestry awareness opportunity for our communities.



Ohio Tree Commission Academy participants are a good-humored bunch. Photo Courtesy Ohio Department of Natural Resources

Graduates had the undivided attention of their elected officials and decision-makers who were often interested in what their neighboring towns were doing as well. It was neat to see the light bulbs go on in the audience. After TCA, it wasn't long before we began seeing the influence of the program revealed in community grant applications. They were using urban forestry language and understanding management concepts very well. When communities contacted us for management assistance, they were able to ask more meaningful questions, and we were able to help them address the real issues more effectively.

Our urban forestry team continues to fine-tune TCA, and we are learning even more along the way. We are in the process of our first major update, which includes editing things that weren't working, fixing grammatical and formatting errors and adding other things we missed. Believe it or not, editing and evaluating the program is almost as challenging as developing it. Most notably, as instructors we were forced to expand outside of our specialties, and as a result, we have become more well-rounded public servants. Teaching on this scale was frightening at first, but it has strengthened our presentation, negotiating and listening skills. TCA also has homework, which gives us some field opportunities with TCA candidates. Forty hours or more in the classroom coupled with time in our students' communities has created strong, trusting relationships that will last a lifetime. Despite all of the time and effort invested in TCA, the relationships we've developed with our community volunteers and staff are the most valuable for the future of Urban Forestry in Ohio.

For information about Tree Commission Academy, visit us at www.ohiodnr.com/forestry. Click on “Forestry Assistance” at the top left, then “Urban Forestry,” then “Tree Commission Academy” on the left side of the page. 🌿

