“Do more with less.” How often is that heard in municipal forestry circles and organizations these days? A more encouraging phrase might be, “Work smarter, not harder.”

As individuals in urban and community forestry are called upon to carry more responsibilities, it is essential to increase “capacity,” a word that has come to mean “ability,” or “maximizing possible output.” The keys to increasing capacity are adequate initial training and continuing education to grow and keep up with change. Both are increasingly important as the tools and knowledge base in urban forestry become ever more sophisticated.

Fortunately, there are abundant resources available for everyone involved in the planting and care of trees. This issue is devoted to making readers aware of some of these. At first we considered categorizing the opportunities by potential audience, e.g., volunteer tree planters/stewards, tree board members, professional staff, and commercial tree workers. However, we quickly realized that people in all of these categories have different levels of knowledge and different learning needs. So, we surveyed available resources and have displayed them by delivery method. In this way, you can consider the opportunities based not only on what is needed, but what best suits your preferred learning style or means of obtaining further education.

One thing is true of every individual who loves trees and is working to enrich the world with more of them and to improve their care. Learning more about trees, tree care, and management skills is personally satisfying, opens the doors of opportunity, increases the ability to serve, and—ultimately—benefits communities of all sizes.
Why Education is Vital

Whether you are a young person seeking a career in urban forestry, a tree worker or urban forester wanting to advance, or a volunteer wanting to know more about the field in which you serve, more education is essential for success. Here are some of the reasons as expressed by a panel of leaders in urban forestry.

The practice of urban forestry is a very demanding profession, requiring skill sets beyond tree biology, arboriculture and management. Effectiveness in the profession today is dependent on a multi-disciplinary background and experience that exceeds what is typically covered in preparatory learning programs. Emerging issues and technology are rapidly changing urban forest management needs, foci and approaches. Continuing education is critical for today’s urban forester to rapidly respond to these changes, and to maintain a resilient resource.

– Ed Macie, Regional Urban Forester, U.S. Forest Service, Southern Region (retired)

As municipalities seek ways to incorporate green infrastructure into reducing stormwater runoff, the role of urban foresters and natural resource professionals has become essential. Continuing education in low impact development and other forms of green engineering is an important tool to keep the role of trees current in our cities and towns.

– Steven Sinclair, Vermont State Forester (retired)

There is a great deal of new technology based on sound science that is assisting urban foresters with placing quantified values on the urban forest like never before. This has, in my mind, raised awareness of the benefits of trees and the urban forest among policy makers. In turn, this is opening up new opportunities for urban foresters in the planning and management of their communities.

Continuing education is an integral part of being a professional. As society and technology change, how services are delivered and valued change with societal needs. Keeping current through continuing education is critical to success as a professional.

– Jim Skiera, Executive Director, International Society of Arboriculture (retired)

Being a lifelong learner is key to being a good urban forestry professional (or volunteer). Because urban forestry is so complex – involving technical, administrative, managerial, political, social, and economic considerations – there seems to always be more to learn. Fortunately, there are a lot of resources out there to help people advance their knowledge, skill, and expertise. An important concept is to be able to keep up with change or, better yet, anticipate it, and that requires continuing education.

– Dr. Paul D. Ries, Instructor and Extension Specialist, Oregon State University

As technology changes, continuing education becomes more important than ever.
The Providers

There is virtually no end to the ways a person can learn and grow. This can range from observation and self-study to formal education resulting in a degree. In the pages that follow are some of the materials and opportunities that are particularly important in urban forestry. For the sake of brevity, quick contact information for the sources of these learning tools is provided below in alphabetical order rather than each time a service or product is listed.

ALLIANCE FOR COMMUNITY TREES
An umbrella organization for volunteer groups nationwide. As part of the Arbor Day Foundation, its mission is to support grassroots, citizen-based nonprofit organizations dedicated to urban and community tree planting, care, conservation, and education. Visit arborday.org/alliance for more information.

AMERICAN PUBLIC WORKS ASSOCIATION (APWA)
This is the backbone organization for the men and women in local, state and federal governments that plan, build and manage the nation’s infrastructure. Its purpose is to promote professional excellence and public works awareness through education, advocacy and the exchange of knowledge. Visit apwa.net

ARBOR DAY FOUNDATION
The nation’s largest tree-related organization with membership open to anyone with an interest in trees. Its mission is to inspire people to plant, nurture, and celebrate trees. Visit arborday.org

INTERNATIONAL SOCIETY OF ARBORICULTURE (ISA)
The primary professional organization for arborists, educators, scientists and related professionals. Through research, technology and education, ISA promotes the professional practice of arboriculture and fosters a greater worldwide awareness of the benefits of trees. Visit isa-arbor.com

SOCIETY OF AMERICAN FORESTERS (SAF)
Although primarily focusing on traditional forestry, a working group on urban forestry helps provide networking and continuing education opportunities for natural resource professionals. Visit safnet.org

SOCIETY OF MUNICIPAL ARBORISTS (SMA)
A professional organization comprised of municipal arborists/foresters, consultants, commercial firms and lay citizens who actively practice or support some facet of municipal forestry. Its focus is on networking and providing educational opportunities that promote the sound, professional management of urban ecosystems. Visit urban-forestry.com

TREECARE INDUSTRY ASSOCIATION (TCIA)
An association of tree care companies and professional arborists that adhere to stringent performance standards for work quality and safety. Its services include providing members with educational products and networking dedicated to ethics, guidelines and quality business practices. Visit tcia.org

In addition, the U.S. Forest Service, Cooperative Extension, colleges and universities and many others provide educational opportunities that should not be overlooked.

TOPICS OF SPECIAL IMPORTANCE

Based on current trends and their personal experience, experts point out these topics as heading the list of topics that should be studied.

Technology
- Geographic Information Systems (GIS)
- Remote sensing
- Hand-held data collection
- Database management
- The i-Tree suite of programs
- Canopy analysis

Emerging Issues
- Sustainability practices
- Quantifying ecosystem services
- Invasive insects and diseases
- Trees as green infrastructure
- Resilience – Managing for climate change and natural disasters

Multidisciplinary Learning
- Planning methods
- Public works
- Engineering basics
- Hydrology basics
- Building construction and land development

Social Engagement
- Social networking
- Public speaking
- Working with the media
- Crisis management
- Employee supervision
- Cultural awareness
Self-Help Opportunities at Home

All education requires ‘self-help,’ but listed here are some ways you can learn without leaving home. In addition, of course, books are widely available and an appropriate personal reference library should be developed over time.

TREE IDENTIFICATION

Knowing the names of species in your area is the foundation upon which all practices depend. Even if you are a Saturday volunteer or member of a tree board, you will feel better knowing your trees. Besides one of the many good reference books available, visit arborday.org for a tutorial and online or print identification key, What Tree Is That?

URBAN FORESTRY SOUTH EXPO

This website (urbanforestrysouth.org) was created by the Centers for Urban and Interface Forestry which is part of the Southern Research Station, U.S. Forest Service. An enormous amount of self-help information is available, including an interactive tool to guide tree boards or urban foresters through a planning process that results in a customized management plan for any urban forest.

MANY OPTIONS AVAILABLE FROM ISA

• ONLINE LEARNING CENTER offers an entire catalog of online courses in all areas of arboriculture. At the home page, click on “Education and Research.” Open to anyone, but there is a discount on price for ISA members.

• CDs are available on topics such as tree identification, pruning, risk assessment and more.

• ARBORISTS’ CERTIFICATION STUDY GUIDE and similar publications have been prepared to help with preparation for several categories of certification through ISA. Even if you do not plan to actually practice arboriculture or even take the exam, these are excellent tools to gain knowledge that can help if you are a volunteer or tree board member.

• ARBORIST NEWS is a periodical for members and it always includes a feature article with quiz. Completing the quiz is one of many ways certified arborists can obtain continuing education to keep their certification current.

• PODCASTS can be downloaded or listened to online for free. By subscription, you can be notified as new episodes are posted.

TREE BOARD UNIVERSITY

A thorough online course to help you learn about trees, people and serving effectively in a citizen advisory role at the local level. Study at your own pace and join an online social networking community upon completion. For more information or to enroll, visit treeboardu.org.

Interactive CDs and other educational products from the International Society of Arboriculture can be used at home at your own pace of learning.
Self-Help Opportunities at Home

CD 10-volume Box Set

All education requires 'self-help,' but listed here are some ways you can learn without leaving home. In addition, of course, books are widely available and an appropriate personal reference library should be developed over time.

TREE IDENTIFICATION

Knowing the names of species in your area is the foundation upon which all practices depend. Even if you are a Saturday volunteer or member of a tree board, you will feel better knowing your trees. Besides one of the many good reference books available, visit arborday.org for a tutorial and online or print identification key, What Tree Is That?

MANY OPTIONS AVAILABLE FROM ISA

• ONLINE LEARNING CENTER offers an entire catalog of online courses in all areas of arboriculture. At the home page, click on "Education and Research." Open to anyone, but there is a discount on price for ISA members.

• CDs are available on topics such as tree identification, pruning, risk assessment and more.

• ARBORISTS' CERTIFICATION STUDY GUIDE and similar publications have been prepared to help with preparation for several categories of certification through ISA. Even if you do not plan to actually practice arboriculture or even take the exam, these are excellent tools to gain knowledge that can help if you are a volunteer or tree board member.

• ARBORIST NEWS is a periodical for members and it always includes a feature article with quiz. Completing the quiz is one of many ways certified arborists can obtain continuing education to keep their certification current.

• PODCASTS can be downloaded or listened to online for free. By subscription, you can be notified as new episodes are posted.

TREE BOARD UNIVERSITY

A thorough online course to help you learn about trees, people and serving effectively in a citizen advisory role at the local level. Study at your own pace and join an online social networking community upon completion. For more information or to enroll, visit treeboardu.org.

URBAN FORESTRY SOUTH EXPO

This website (urbanforestrysouth.org) was created by the Centers for Urban and Interface Forestry which is part of the Southern Research Station, U.S. Forest Service. An enormous amount of self-help information is available, including an interactive tool to guide tree boards or urban foresters through a planning process that results in a customized management plan for any urban forest.

TCIA WEBINAR SERIES

Browse “Webinar on-Demand” for a long list of archived webinars on worker safety and other practical topics. A nominal charge, with non-member prices slightly higher.

OTHER WEBINARS

Increasingly, various organizations or collaboratives are offering webinars. Here are two that are pertinent: Urban Forestry Today (urbanforestrytoday.org) and Urban Forest Connections Webinar (fs.fed.us/research/urban-webinars).

WHAT IS A WEBINAR?

This is a conferencing tool that connects a widely dispersed audience in real time and allows for the presentation of PowerPoints or other visuals as well as a view of presenters. Audience members log in to the URL and dial in to a specific conference call number. You need only internet and a phone to participate. Past webinars are usually archived for use any time.

i-TREE USER FORUM

If you are using any of the many i-Tree tools for community forestry analysis and benefits assessment, you can expand your knowledge by joining others at the user forum. Registration is required to participate, but not to browse the questions and answers that are posted at this helpful site. Visit itreetools.org and find the user forum under the ‘Support’ tab.

Modern technology makes it possible to participate in educational opportunities without leaving home or the office.

The i-Tree user forum is a way to have questions answered and to share your experiences with others who are using the i-Tree programs.
Conferences and Workshops

Besides the opportunity to meet and hear from experts, conferences and workshops offer a chance to network and share experiences with peers. They also provide an opportunity to view exhibits or new equipment, see urban forestry applied in different settings, and get “recharged” with energy and enthusiasm. This means of learning requires time away from home or the job but can be one of the best investments ever made by you and/or your employer. Here are a few opportunities available annually or more often. Although only the lead organization is shown, in most cases the events are co-sponsored by others not shown here.

**ALLIANCE FOR COMMUNITY TREES DAY**

is held annually in conjunction with the Arbor Day Foundation’s Partners in Community Forestry Conference. It is an opportunity for community tree planting organizations to come together and learn from their peers, share stories, and celebrate their achievements with one another.

**ISA ANNUAL CONFERENCE AND TRADE SHOW**

Arborists and urban foresters benefit from this annual event that provides the latest in research findings, technological innovations and best management practices. A Tree Academy Workshop is an extension of the conference and focuses in-depth on a topic such as use of i-Tree tools.

**MUNICIPAL FORESTRY INSTITUTE (SMA)**

This is a high-level training opportunity for professionals. Administration, leadership and management skills are the focus, including topics such as coalition building, strategic thinking, program planning, and public relations.

SMA also sponsors an Annual International Conference and Trade Show.

**NATURE EXPLORE WORKSHOPS**

Training opportunities are available for educators and design professionals to support the planning and use of Nature Explore Classrooms and other efforts to connect children with nature.

Comfortable facilities at the Lied Lodge & Conference Center at Arbor Day Farm help facilitate training sessions of all sizes.
COMMUNITY TREE MANAGEMENT INSTITUTE

The Community Tree Management Institute is available in many states. Its format and content varies, sometimes presented like a workshop and sometimes combining face-to-face sessions with online instruction. The purpose is to provide urban forestry education for employees working with tree management in parks, public works, planning or other positions but who lack training in urban forestry. Contact the urban forestry coordinator in your state for information on availability.

PARTNERS IN COMMUNITY FORESTRY CONFERENCE (ARBOR DAY FOUNDATION)

As the name implies, the focus is on building productive partnerships and coalitions. Auxiliary events often include meetings of state coordinators, Tree Campus interests, utility arborists and others. The conference moves to a different part of the country each year and always includes local tours.

TREECARE ACADEMY (TCIA)

The Academy consists of courses that are presented to specific companies to help in the credentialing of employees. The goal is to teach and test for critical skills and core knowledge to help tree care employees work safely and professionally.

SAF NATIONAL CONVENTION

Professionals in traditional forestry and urban forestry mix at this annual convention. The Urban Forestry Working Group takes the lead for concurrent technical sessions and local tours.

SUSTAINABILITY IN PUBLIC WORKS CONFERENCE (APWA)

This is a relatively new annual event. The purpose is to explore the latest and most innovative tools and practices used by public works professionals and to hear presentations of case studies that promote sustainability.

LOCAL OPPORTUNITIES

Many communities offer workshops for volunteers or property owners. Your state or local urban forester would be a good source of information about these. Another major provider is Cooperative Extension’s Master Gardener Program. Contact the land grant university in your state or county extension office for information.

i-TREE TRAINING

Workshops are offered several times each year to help participants learn to use the latest software tools.

An advantage of workshops is the opportunity to network with others and receive hands-on training and advice from leaders in conservation and urban forestry.
Formal Education

Many colleges and universities throughout the United States offer courses, minors, and majors in arboriculture or urban forestry. Upon completion, students can earn an associate degree, Bachelor of Science degree, master’s degree, or even the Ph.D. For a list of schools and what they offer, visit ISA’s website and enter “Careers in Arboriculture” in the search box.

Supplementing formal education are various internship programs. Some are conducted between a campus and the city forester’s office; others are available through organizations such as the Society of Municipal Arborists. Summer jobs and entry positions with tree care companies offer excellent opportunities for hands-on learning and in some cases a chance to attend training sessions or serve apprenticeships. For information contact companies such as Asplundh, Davey, Bartlett, and SavATree.

VOLUNTEERING

Many communities offer volunteer opportunities to help grow, plant, and care for trees. Training is usually part of the program and is an excellent way to receive hands-on learning. For ideas about the breadth of opportunities that can be found, visit arborday.org and search for “Volunteer Center.”

The fields of urban forestry and arboriculture are rich with learning opportunities at all levels.