

The Pulse of the Urban Forest Working Group Focused on Urban Tree Growth and Longevity

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*“Acts of creation are ordinarily reserved for gods and poets.
To plant a pine, one need only own a shovel.”*
(Aldo Leopold)

Dr. Leopold is correct in that a tree can be planted with only a shovel. However, we all know that if that tree is to survive and thrive in the built environment, it will need much more. Tree growth and longevity depends on so many factors, from management considerations, like proper planting and long-term care and pruning cycles, to environmental factors, like site conditions and species tolerances. If arborists, urban forest managers, and communities are to be successful in stewardship of urban trees, then we need more than a shovel and possibly more than an act of creation from a poet or god.

A successful approach toward this lofty goal might begin with a network of practitioners and researchers working collaboratively to engage professionals and volunteers in monitoring urban tree growth and longevity. The Urban Tree Growth & Longevity (UTGL) Working Group is focused on exactly that approach. Through this network, members share diverse perspectives and work together to produce new field-based knowledge about how trees grow and thrive in urban environments.

The UTGL Working Group is an independent collaboration of scientists and professionals interested in the growth and longevity of urban trees. Formally, we are a Working Group under the Arboriculture Research and Education Academy (AREA) of ISA. UTGL was

formed in 2010 at the International Society of Arboriculture’s annual conference in Chicago, Illinois. In the five years since, we have grown from our inception over a short conversation among a few researchers to a global network with more than 170 members, which now includes students, consulting arborists, non-profit leaders, and university and government researchers.

The mission of the UTGL Working Group is to foster communication among researchers and professionals, enrich scientific exchange, and enhance the quality, productivity, and timeliness of research on tree growth, mortality, and longevity through collaboration. The UTGL Working Group provides professionals with the information they need to make decisions that improve tree performance. Understanding how factors interact to influence tree growth, mortality, and longevity is fundamental to actualizing the value of urban forests through: 1) tree selection (matching trees with site conditions), 2) modification of site conditions to foster desired tree performance, 3) targeting tree care and monitoring to improve return on investment, 4) predicting tree replacement needs due to mortality, and 5) modeling of tree benefits and costs.

Recent Accomplishments

Over the past five years, the Urban Tree Growth & Longevity Working Group has accomplished the following:



- UTGL created by-laws to govern itself. We have had two terms of officers for the elected positions of chair, vice-chair, secretary, and web & communications. We are the first formal working group of ISA under AREA.
- Symposium at The Morton Arboretum (Lisle, Illinois) in 2011 (www.masslaboratory.org/urban-tree-growth-longevity.html), which led to a special issue in *Arboriculture & Urban Forestry* (Volume 38, Issue 5). A special feature of this symposium was a research roundtable with all attendees to discuss and rank research priorities (Leibowitz 2012). This symposium was the first of what is now annual Urban Tree Conference led by the Center for Tree Science at The Morton Arboretum.
- Urban Tree Monitoring Protocols (www.urbantreegrowth.org/urban-tree-monitoring-protocol.html), initiated at the 2011 UTGL Symposium, grew from a survey of practitioner-based monitoring projects (Roman et al. 2013) and involved collaboration on the part of about 30 researchers and local urban foresters from across the U.S., with a few international participants.
- UTGL led symposia at ISA international conferences in Portland, Oregon (2012) and Milwaukee, Wisconsin (2014).
- Free fieldtrips highlighting local projects related to urban tree growth and longevity at the ISA conferences in Portland (2012); Toronto, Ontario, Canada (2013); and Milwaukee (2014). These fieldtrips also offered opportunities for informal conversation among members with related interests.
- Quarterly newsletters (www.urbantreegrowth.org/newsletters.html) to our members with topical content related to our mission, with articles featuring recent projects by members.

There are many benefits of a working group with a relatively narrow topical focus but a wide geographic membership and range of member careers represented. These advantages include: diverse perspectives, range of skills and expertise, opportunities to learn from one another, and opportunities to highlight local and regional projects for a national and international audience. UTGL membership is free and open to all individuals with professional or research interests in urban tree growth and longevity (www.urbantreegrowth.org/join.html).

References

- Leibowitz, R. 2012. Urban tree growth and longevity: An international meeting and research symposium white paper. *Arboriculture & Urban Forestry* 38(5): 237–241.
- McPherson, E.G., and B.C. Scharenbroch. 2013. Urban tree growth and longevity: Introduction. *Arboriculture & Urban Forestry* 38(5):171.



Roundtable discussion and lunch at the 2011 UTGL Symposium at The Morton Arboretum (Lisle, Illinois, U.S.).



Poster and social session at the 2011 UTGL Symposium.



In 2014, UTGL field trip included stopping to discuss urban forestry in Milwaukee, Wisconsin, U.S.

- Roman, L.A., E.G. McPherson, B.C. Scharenbroch, and J. Bartens. 2013. Identifying common practices and challenges for local urban tree monitoring programs across the United States. *Arboriculture & Urban Forestry* 39(6):292–299. A•N