



Tree and Soil Research Fund Newsletter

Vol. 2, Issue 2 • August, 2020

An update from James Urban

As a member of the TREE Fund Board of Trustees, I recently have been appointed as chair of TREE Fund's Development Committee. My work in the past few years has been to build the endowment for the Tree and Soil Research Fund (TSR Fund). Now I wear a second hat, assuring that TREE Fund's operations funding remains at levels that will support our work funding research and providing educational opportunities such as our webinar series. TREE Fund is a charitable foundation that relies entirely on donations. TREE Fund is not a membership organization, we do not collect dues or sell publications or have other sources of income. Like most foundations, charitable giving to TREE Fund has collapsed due to the impacts of the COVID-19 pandemic and resulting economic downturn.

Our primary fundraising event has, for many years, been the Tour des Trees, a bicycle ride that spans a week and covers hundreds of miles. Riders volunteer their time and effort and find sponsors to back them with donations. This year's Tour des Trees was planned for the Rocky Mountains, but was postponed to 2021 after the global pandemic made the event impossible. This created an immediate and dire funding need.

We have created a virtual Tour des Trees to raise the needed funds, and I'm asking you to help. You can participate where you are in an activity of your choice. The event will be fun, but the need is quite serious. Visit tourdestrees.org to learn more and register.

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TREE Fund has always been a lean organization—and we've cut our operating expenses by more than 25% this year but the COVID-19 pandemic is presenting an existential threat. Without sufficient operating funds, any nonprofit closes its doors, and its important work ceases. TREE Fund is too valuable, too important, for us to allow that to happen. I'm asking that, in 2020, any donations you were going to make to the TSR Fund go instead as unrestricted gifts to cover TREE Fund's operating expenses. Donations made at the "[DONATE NOW](#)" button on our website, treefund.org, go directly to our unrestricted funds.

We need your financial help now! Please, give—and participate in the upcoming virtual Tour des Trees—as you are able.

Thank you,

James Urban, FASLA and TREE Fund Trustee

TREE Fund grant supports citizen appreciation for urban trees

Can landscape architects ever learn enough about the trees they specify in their work? Probably not. This complex subject can fill a lifetime of curiosity. A recent TREE Fund education grant to Holden Forests & Gardens, which is made up of The Holden Arboretum and Cleveland Botanical Garden in northeast Ohio, supported 'Neighborhood Tree Walks' to educate citizens in Cleveland on the trees that make up their urban forest and to encourage them to support and improve the city's urban forest. The walks, led by Holden's Community Forestry



*Holden Neighborhood Tree Walks
Photo Credit: C. Blashka*

arborists, include tree identification, characteristics, benefits, folklore, and trees contributions to the cities' social, physical and economic health. Prior to the onset of the Coronavirus shutdown, two successful tours were conducted and more will be scheduled once it is safe to convene group events.

Neighborhood Tree Walks partnered with Cleveland Public Library to promote non-fiction and fiction books on trees as well as post walk discussion.

The Holden Arboretum has a long history of participation in urban forest issues. It was a sponsor of one of the first conferences on urban tree research in 1979, and continues its focus on urban trees. One current effort, Tree Corps, is a successful work / study program where students who have not otherwise had the opportunity

to engage in green careers, receive exposure and training in tree-care and related natural resource careers. Tree Corps has a goal of diversifying the tree care workforce, particularly in underserved communities. Landscape architects in NE Ohio would improve their urban tree acumen by attending the arboretum's many offerings.



*Holden Tree Corps
Photo Credit: C. Blashka*

Digital tree assessment: Applications for landscape architects

By James Urban, FASLA Urban Trees & Soils

Many of us are working remotely, and the ability to travel even relatively short distances to a project site is limited. How usable is remote sensing to evaluate trees at a project site? A TREE Fund-supported researcher, Adam Berland, PhD at Ball State University, has been testing this idea and used a large sample study of people evaluating trees to see how accurate the information is on Google Street View. The study, which was designed to test the accuracy of a digital street tree inventory, considered four tree aspects: genus and species identification, size (DBH) and tree count (was there a tree in the indicated location?). Participants self-identified themselves as 'experts' such as arborist, "intermediate" and "novice". The second two groups were citizen volunteers who ranged from people confident in their skills to relative newcomers with minimum training. While the study was intended to help urban foresters understand the

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Digital tree assessment: Applications for landscape architects

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usefulness of digital data recording for urban tree inventories, Dr. Berland felt that it is a good reference point for understanding confidence levels in other applications such as digital tree assessments that could be useful for landscape architects.

The study found that assessment of tree genus and tree count were reasonably accurate with participants who had good confidence in their skills. Species identification and visual estimate of tree trunk (DBH) was less accurate in the intermediate and novice group. Dr. Berland and I agreed that some aspects of tree condition and a site's ability to support good tree growth could be successfully incorporated into practice with the understanding that field assessment by an expert needs to be undertaken, particularly related to issues of risk and ability to survive construction. However, a digital assessment is a very good step in making basic design decisions, particularly by a professional with experience in the approach. Like most tasks, skills increase with practice.

One factor in the assessment is the date of the photos. Google reshoots a large city about every 4-5 years. Older images are accessible and worth examining. Season of the image is also important. Winter images are not very useful. Late summer and early fall images can reveal stressed trees turning early fall color or losing leaves earlier than normal. Other image sources can provide additional information. Geoff Valentino, a landscape architect at Hollander Design uses 'Nearmap' which has better quality resolution aerial photography and greater frequency in photo updates.

I have been using Google Street View photographs to assess tree growth responses to urban soils. I find that rough assessment of tree vigor (leaf color and percent of canopy with dieback) can be made. Tree structure (points of potential tree structural failure) is much more difficult. Despite the limitations, good general assessments can often be made to identify the extremes of desirable trees that are very likely worth retaining and trees that are clearly not good candidates for retention. The trees in the middle need further investigation. Determining issues with disease and insect infestation are too difficult. Issues with trunk flares on older trees can sometimes be observed depending on shrub and ground cover obstruction. General soil conditions can sometimes be assessed by the condition of the trees, shrubs and other plantings compared with nearby landscapes. Open construction sites nearby, can give a glimpse into the local ambient soils. All this information when combined, can lead to basic conclusion about potential tree tolerance for construction and/or basic soil modifications for new plantings.

Virtual assessment does not replace the need for onsite investigation but can keep the design process going when a site visit is not possible.



Trees that can be assessed from a Google Street View Image
Photo Credit: Google Street View



High resolution aerial view of trees from Nearmap.
Photo Credit: Nearmap



Street trees with a range of health and site conditions.
Photo Credit: Google Street View

Tour des Trees: *Rollin' in Place*

The physical Tour des Trees: *Rollin' the Rockies* ride (in Colorado) has been postponed to 2021, but a new virtual campaign—Tour des Trees: *Rollin' in Place*—has been launched to fill the gap! The decision was made to postpone the physical Tour in response to the effects of the pandemic restrictions and risks posed to event participants.

Traditionally Tour des Trees riders would spend a week riding through a state or region, engaging with communities and raising funds for TREE Fund. Instead of riding 321 miles in the Rockies this year, we challenge you to take on 321 your own way! Ride 321 km a month the entire duration of the campaign, run 3.21 miles a day, do 321 pushups a week, walk your dog 321 miles, pogo- stick jump to a new record of 321... you get the idea. 321 is the magic number! The campaign will continue through Nov. 15.



We recognize that in the past there have been physical and financial barriers to those who may have been interested in supporting Tour des Trees but couldn't take the time away from work, found the physical challenge to be too extreme, etc. We hope this new platform opens doors for anyone who has ever been curious about Tour des Trees, and we invite you to join Team ASLA and support current riders or participants.



Team ASLA 2019 members
Kristopher May (l) and David Gorden (r).

Visit tourdestrees.org to learn more, check out current distance and fundraising leaderboards, and register. The funds raised by the Tour are what keep TREE Fund up and running and we are so very grateful that when times get tough we can depend on you, our TREE family.

Please note that this is not a request from the ASLA.
This fundraising effort is solely from TREE Fund, a 501(c)3 non-profit organization.
For inquiries contact treefund@treefund.org or visit www.treefund.org.

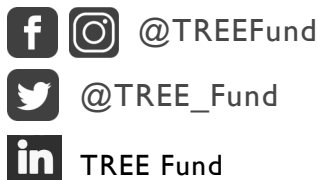
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TREE Fund is a 501(c)3 nonprofit with a mission of supporting scientific discovery and dissemination of new knowledge in the fields of arboriculture and urban forestry