
175 Years: Soil Trends & Maintenance at the Smithsonian Gardens

(FRI-B03)

OVERVIEW

Friday, November 19, 2021
3:45 PM – 5:00 PM

Encompassing 59 acres alongside the National Mall in Washington, D.C., the planting soils surrounding the Smithsonian museums uniquely reflect the planting soil trends at the time of each museum's completion or most recent renovation, creating a diverse patchwork of soil types in a relatively isolated footprint.

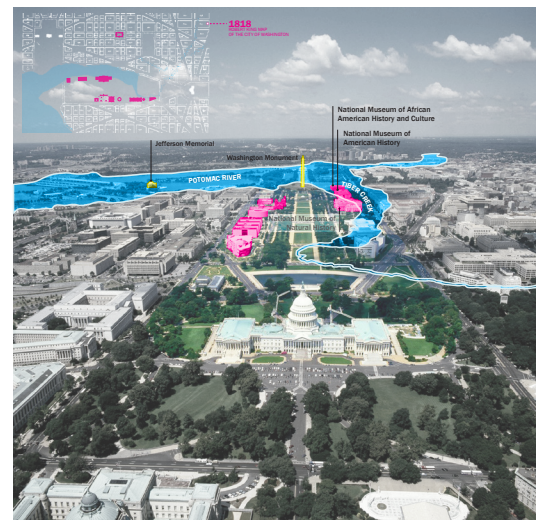
Selection and use of the different soil types has resulted in a wide range of maintenance needs on each site, ranging from basic annual mulching and mowing on one site to bi-weekly applications of fungicides, fertilizers and three to four irrigation applications each day to sustain vegetation on another.

Most landscape architects have a reasonable understanding of soil, from soil texture, drainage, nutrient supply, and organic matter but how does this information translate to a finished project and what impacts do those decisions have? What many who depend on soils as part of their design don't consider is the maintenance impact of their soil choices which can trip up their brilliant design, making it difficult to construct and potentially a failure in performance.

By looking at each of these landscapes in comparison to one another, the 2021 Smithsonian Gardens Planting Soils Assessment showed the results of various soil designs and created an approach for remediation and planning for the future. This session will provide insights into successful and failing soil trends over time, and what can be done to plan for the future.

LEARNING OBJECTIVES

1. Learn and understand the trends of soil design over time and the profound impacts on landscape design, maintenance and function.
2. Learn and be aware of soil management that will affect plant performance and landscape performance.
3. Demonstrate the role of long term soil planning and remediation for successful site performance, sustainable maintenance practices, economic viability and savings for your project.
4. Think differently about currently accepted concepts about soil types and uses in landscapes.



Tiber Creek circa 1791, overlaid on today's DC aerial



Soil samples from the Smithsonian Gardens

SPEAKERS



Paul B. Josey, ASLA

Principal, Wolf Josey Landscape Architects



Paul is the co-founder Wolf Josey Landscape Architects and has led a diverse range of city, campus, garden and conservation projects of all sizes throughout the Mid-Atlantic and Southeast. He has specific expertise in urban and campus design, planting soils, tree preservation, construction implementation and native plants of the Piedmont and Coastal Plain.

His earlier design experience as a project manager at Nelson Byrd Woltz and at Urban Trees + Soils in Annapolis also focused on urban, academic and institutional projects while overseeing the master planning and implementation of various award winning mixed use, city park, waterfront and campus projects.

Marisa N. Scalera, ASLA

Landscape Architect, Smithsonian Institution



Marisa Scalera is a Landscape Architect for Smithsonian Gardens, an outdoor museum and living classroom with 25 million annual visitors. Since joining the Smithsonian Institution team in 2016, Marisa collaborates on all garden exhibits and planning, design, and construction projects in the Smithsonian Gardens. She is a licensed landscape architect with twenty years' experience practicing landscape architecture in Washington, DC. Her work supports Smithsonian Gardens' broader mission to engage people with plants and gardens, inform on the roles both play in our cultural and natural worlds, and inspire appreciation and stewardship.

Ted Hartsig

Senior Scientist, Olsson



Ted is a professional soil scientist with expertise in natural resources, urban environments, and ecosystem restoration. He is a leader in soil and plant management strategies for both urban and rural landscape projects. Ted's experience includes working with the design teams for landscapes at the George W. Bush Library in Dallas, the Gateway Arch in St. Louis, Memorial Park in Houston, corporate campuses in California and Washington, and Tulsa's Gathering Place Park, among other landscape development projects. Ted has developed and conducted workshops for the design and construction of stormwater BMPs, native landscapes, and soil restoration and management.

NOTES



RESOURCES/FURTHER READING

Up By Roots: Healthy Soils and Trees in the Built Environment, By James Urban