Timothy Baird

FASLA, RLA. Professor and Chair of Landscape Architecture at Cornell University // from vacant land to productive, inhabitable, performative landscapes // a prototype arboretum evolving from tree cultivation over an extended period // techniques building on lessons learned along the way Over the past few decades, the urban fabric of North American cities has been radically altered due to many forces: dispersed settlement patterns, decentralised and abandoned urban cores, economic downturns, political shifts, rapid suburbanisation, and deindustrialisation. Taken together, this has led to an overall excess of space. Much of the leftover land – contaminated, in various states of decay and dis-usesage - stands much in need of reclamation.

Given the economic realities of urban reclamation, solutions to urban vacancy issues today must be resilient and phased over time. The significant cost of regenerating vast acreages of often toxic land, coupled with the public's desire to see immediate progress, calls for cost-effective and carefully crafted interventions. To be embraced by the public, those interventions must be productive as well as suitable for human habitation and interaction. Urban Arboreta, in Philadelphia, exemplifies such a project.

The Urban Arboreta concept originated with a 2005 international ideas competition that sought design proposals to help resolve Philadelphia's vacancy problem. Matt Langan (at the time an undergraduate landscape architecture student)

Reclaiming urban ground in Philadelphia



'Vacant Land Typology' from Empty Philadelphia: A User's Guide to Lot Vacancy developed in a design studio at the Pennsylvania State University Department of Landscape Architecture. proposed that vast acreages of dormant, vacant land in Philadelphia be transformed into productive, inhabitable, performative landscapes used to grow trees for subsequent transplantation along streets, depleted riparian corridors, in parks or other areas designated for reforestation. Langan envisioned urban arboreta as an integral component of a neighbourhood environmental system - an ecological infrastructure including stormwater management, bicycle and pedestrian circulation, soil production, and composting operations, along with recreational programming. Over subsequent years, additional student design inputs, Knight Cities Challenge grants, and a partnership formed between City Parks Association and Penn State University led to developing a prototype native plant nursery for a city-owned vacant site with Scott Quitel, an urban ecologist and founder of the non-profit organization, Land Health Institute (LHI). Quitel, a consultant with many years of experience creating native plant nurseries on project sites, works on urban vacancy revitalisation with a primary focus on getting people out into these vacant lands to



Existing conditions at Parkside Avenue site.

Aerial of two city-owned vacant sites, on Merion Avenue and Parkside Avenue, used in the student design competition.





View of the proposal of student design competition finalist Wilson Lee's (Penn State).



Site section of the proposal of student design competition finalist Fang Qin's (Penn State).



View of the proposal of student design competition finalist team of Omar De Mesa, Vincent Tang, and Eric Wong's (University of Manitoba).

<u>URBAN ARBORETA</u>

Location: Philadelphia, PA Project Designers/ Collaborators: Land Health Institute is nursery designer Project size: 3 acres / 1.2 hectares

Year built: Installation of nursery began in fall 2017, Construction ongoing Sponsor: LHI, lessor from Philadelphia Industrial Development Corporation (PIDC), a quasi-city agency Budget/cost: \$50,000 to date not including labour



Community volunteers tending the nursery with one of two new high tunnels in background.

learn about urban ecology right in their neighbourhoods. After coordinating and negotiating with city agencies, his LHI obtained a three-year city lease for a three-acre vacant property in West Philadelphia.

The goal of the prototype PhilaFlora Nursery of Land Health Institute, is to offer job training in nursery management techniques and business, skills that will eventually support careers in public service or in the private sector. The business plan, developed by students in the MBA programme at the Fox School of Business of Temple University, explored self-sustaining models that would generate revenue.

To grow its PhilaFlora products, this nursery builds on the past efforts of many landscape architecture students, faculty, city agencies, and organisations who worked to advance conceptual ideas, and realise them in a prototype native plant production operation. As it develops, the nursery will allow testing of species and growing methods to ascertain suitability, allow refinement of spatial requirements, generate research data on efficacy, and provide a laboratory for the development of a long-term maintenance and management strategy for this much needed integral open space amenity for the neighborhood. Long term, the hope is that this prototype nursery will be transferrable to other neighbourhoods as well as other cities interested in using urban arboreta to further transform other urban grounds.



PhilaFlora Nursery of Land Health Institute, on Parkside Avenue.