

# The Urban Forest of Tomorrow

Strategies for a Changing Environment

June 14-15, 2018 • University of Toronto Mississauga Campus

## Featured speakers include:

Dr. Cecil Konijnendijk van den Bosch — University of British Columbia

**Janet McKay** — Local Enhancement and Appreciation of Forests (LEAF)

Henrik Sjöman — Swedish University of Agricultural Sciences

**David Callow** — City of Melbourne, Australia

Dr. Peter Del Tredici — MIT, Cambridge Massachusetts

**Keith Sacre** — Barcham Trees, United Kingdom

**Joris Voeten** — Urban Roofscapes, The Netherlands

**Meaghan Eastwood** — Toronto and Region Conservation Authority

**Ted Green MBE** — Ancient Tree Forum, United Kingdom

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# The Urban Forest of Tomorrow

Strategies for a Changing Environment June 14-15, 2018

# University of Toronto Mississauga Campus



In this two-day conference, leading experts from three continents will guide participants through the challenges and opportunities that environmental changes pose for our urban forests, with a focus on planning today for the future of this vital green infrastructure.

Seven international and two local speakers will showcase new improvements and advances in species selection, planting methods, engineering solutions and the latest in tree conservation approaches. Join us for a unique series of lectures set amongst the spectacular facilities and forests of the University of Toronto Mississauga Campus.

This educational event is open to all, including **arborists**, **landscape architects**, **urban foresters** and **planners**, **ecologists**, **green industry professionals**, **students**, and anyone with a passion for learning about the latest research and advancements for the future of trees in our urban landscapes.

Regular Registration = \$425.00 + HST Full-Time Student Registration = \$185.00 + HST

**Registration includes**; All educational events, and access to exhibits on Thursday June 14th and Friday June 15th. Breakfast, lunch and refreshments during breaks will be served on both days.

# **Register Online**

To register by phone call 905-274-1022 To register by mail use form on page 9 To sponsor this event email <u>info@ufis.ca</u>

#### Require Accommodation?

- ◆ A limited block of rooms have been reserved at <u>THE GLENERIN INN & SPA</u> located close to the UTM campus. The special rate is \$149.00 per night. Contact the Inn directly at (905) 828-6103 quoting group code "UTM-UrbanForest"
  \*Deadline for reservation is May 3rd 2018 or until block sells out\*
- A variety of options are available directly on the Mississauga campus grounds. Prices range from \$62 to \$75 per night. For more information and to reserve accommodations please contact Simon Hill from the University at <a href="mailto:simon.hill@utoronto.ca">simon.hill@utoronto.ca</a>
- ◆ Contact us at 905-274-1022 or info@ufis.ca for additional options

Organized by Urban Forest Innovative Solutions, presenters of the successful Soils & Urban Trees Conferences held in Toronto Ontario, Vancouver British Columbia and Asheville North Carolina







## Prof. Cecil Konijnendijk

The Urban Forest of Tomorrow – Emerging Storylines for Leafy Success

Urban forests provide a range of crucial contributions to our cities and towns. However, their importance is often not reflected in political arenas nor in terms of allocated resources. Taking a global perspective, and through examples from across the world and Canada, this talk identifies some of the most promising developments and storylines for urban forestry. It will show how linking urban forests to, for example, public health, happiness, and economic interests can lead to success and more sustainable urban forestry programmes.



Prof. Cecil Konijnendijk is a Professor in the Faculty of Forestry, and Program Director for Urban Forestry. He studies, teaches and advises on the role of trees and green space in our cities and towns. His particular interests include green space governance (including community involvement), people-nature relationships and cultural ecosystem services, and urban forestry and urban greening. Professor Konijnendijk's research has taken him across the globe where he has worked in close dialogue with decision-makers and practitioners. Before coming to UBC, he worked at Wageningen University (Netherlands), the European Forest Institute (Finland), the University of Copenhagen (Denmark), the Swedish University of Agricultural Sciences (Sweden), and the University of Hong Kong (Hong Kong, China). His research and teaching at UBC focus on urban forest governance, legislation and administration. Cecil is a member of the Board of Directors of the International Society of Arboriculture, and editor-in-chief of the journal 'Urban Forestry & Urban Greening'.

## **Janet McKay**

Advocating for Urban Forests as Essential Infrastructure

Urban forests provide a multitude of measurable benefits such as storm water attenuation, energy savings, human health benefits and climate change mitigation. However, municipalities are on their own when dealing with escalating threats from exotic pests, more frequent and severe storms and the loss of soils in urban developments. In order to contribute to healthy, resilient communities, these valuable green assets need to be managed proactively and supported consistently across the province. Janet will share the efforts of the Green Infrastructure Ontario Coalition to gain support from higher levels of government and will provide highlights of the resources developed to help stakeholders advocate for urban forests.



Janet McKay is the Executive Director of LEAF (Local Enhancement and Appreciation of Forests). Janet holds an Honours B.A. in Environment and Resource Management and a Permaculture design certificate. In 1996 she founded LEAF, a not-for-profit community organization dedicated to the protection and care of the urban forest. Initially started as a neighbourhood project, LEAF now operates in 12 municipalities within the Greater Toronto Area. With a focus on community engagement and bringing stakeholders together, LEAF seeks creative and collaborative solutions to urban forest challenges. Janet is also a founding member of the Green Infrastructure Ontario Coalition.

#### Dr. Peter Del Tredici

Human Nature – *Urban Ecology* 

Spontaneous urban ecosystems are the ultimate manifestation of the dynamic conflict between humans and nature – between our desire for neat, orderly landscapes on the one hand and our fear of messy ecological chaos on the other. This presentation will focus on the plants – especially trees – that grow without cultivation in cities and their remarkable ability to flourish in spite of stressful environmental conditions. Cities can be considered "novel" ecosystems and their vegetation reflects an irrevocable past and presages an unpredictable future. For better or worse, the spontaneous vegetation of our cities is as cosmopolitan as its human population and, quite often, better adapted than the native species that once grew there. In the era of shrinking municipal budgets, this vegetation can be viewed as part of the solution for cleaning up the mess we have made of the planet.



Peter Del Tredici is a botanist specializing in the growth and cultivation of trees. He retired from the Arnold Arboretum of Harvard University in 2014 after working there for 35 years as Plant Propagator, Curator of the Larz Anderson Bonsai Collection, Editor of Arnoldia, Director of Living Collections, and Senior Research Scientist. He taught in the Landscape Architecture Department at the Harvard Graduate School of Design from 1992 through 2016 and is currently teaching classes in Urban Ecology in the Urban Planning Department at MIT. In 2013, he was awarded the Veitch Gold Medal by The Royal Horticultural Society "in recognition of services given in the advancement of the science and practice of horticulture." His research interests include plant exploration in China and Japan, the natural and cultural history of the Ginkgo tree, and vegetation responses to climate change.

#### **Joris Voeten**

Connecting Green Infrastructure to the Built Environment with Water

Rapid urbanization and climate change are creating immense pressure on cities and their inhabitants worldwide. Urban trees are a great and cost-effective ally in combatting the urban heat island effect and reducing the risk of urban flooding while providing crucial green space for human health and well-being. However, in increasingly dense cities we find that space for trees, and especially tree roots, is getting scarce.

This talk will explore how innovative practices in managing urban water are transforming our views on rainwater from "waste" to resource. By creating multi-functional green spaces in and on top of our cities we can create economic, ecological and human value and help mitigate adverse climate change effects on our cities. Case studies will illustrate how cities that treat water with respect, as nature does, become more resilient urban ecosystems.

Based on his MSc in Tropical Forestry from Wageningen University, Joris uses plant growth to create livable, sustainable and healthy green cities for people. By designing and developing new systems to create green space in cities with sustainable and multifunctional trees in streetscapes, his aim is to bring the circular ecosystem approach in to urban development. Reducing the urban heat island effect and mitigating urban floods play a key role in all of the designs and concepts, each with its own structure, use, circular water management system, substrate and species selection.



#### **David Callow**

Building Climate Resilient Urban Forests - A Melbourne Perspective

Melbourne has long been regarded as Australia's 'garden city', but more than a decade of drought and severe water restrictions has left the city's tree population in a state of unprecedented decline – and it's only going to get hotter! The Melbourne Urban Forest Strategy seeks to manage this change and provides a strategic framework for the city's urban forest. A core focus of the strategy is to adapt the urban forest to climate change by increasing forest diversity and to mitigate extreme heat by increasing canopy cover.

The success of the tree planting program is critical to achieving the outcomes of the Strategy. Since it was endorsed in 2012, the development of several key tools enables clear, evidence-based decision-making for tree planting throughout the municipality. Among these tools include:

- Trees for Melbourne's Climate Future .
- Urban Forest Precinct Plans
- Urban Forest Visual

To inform tree management into the future and to achieve a healthy tree population, the City is also developing an Urban Forest Health Management Plan. This plan includes:

- Strategies to manage species, age and spatial diversity,
- Tools and guidelines for the assessment and management of health threats.
- Contemporary knowledge and best management practices for maintaining tree health.
- Indicators for monitoring urban forest health.

David will share his experience in developing and utilizing these tools and strategies and provide valuable insights for urban forest stakeholders interested in applying similar approaches to solving challenging and complex problems facing their local urban forests.

David Callow leads the multi-disciplinary Urban Forest and Ecology team for the City of Melbourne, Australia. The team is responsible for implementing the world-recognised Urban Forest Strategy and the recently released Nature in the City Strategy. Prior to joining the City of Melbourne, David was an Arboricultural and Landscape Consultant and has worked in Landscape Horticulture for two decades. David has qualifications within the fields of Horticulture, Arboriculture and Natural Resource Management. He is passionate about creating healthy and diverse landscapes through ecosystem driven climate adaptation, community participation and strategic thinking.











#### **Keith Sacre**

Are Nurseries Preparing for the Future Urban Forest?

In this presentation Keith will examine nursery production and ask the question "is the nursery industry meeting the requirements of today and tomorrow's urban forests?" Keith will look for answers to this question by exploring best practices in the nursery (including crown and root development), the monitoring of physiological health of trees in nurseries, and the Arborcheck nursery benchmark system. He will consider how current species in nursery production meet or do not meet the need for urban forest resilience and species diversity and question whether the ecotypes currently in production actually mirror the needs of urban forest managers.

Finally, a case study will reveal how one UK tree nursery has tried to rise to the challenge presented by the current and future demands for urban forest trees by not only modifying its production methods, but also by embracing a series of innovative initiatives designed to place the nursery at the centre of the urban forest debate.



Keith is Arboriculture and Urban Forest Director at Barcham Trees, the largest container tree nursery in Europe. He is Chairman of the UK Arboricultural Association, a trustee of the Trees and Design Action Group (TDAG) and a director of Treeconomics. He has an MSc in Urban Forestry, a BSc in Arboriculture, and a BSc in Social Science. Prior to joining Barcham Trees, Keith gained valuable experience working with other major tree nurseries in the UK and managing trees and other greenspace in the public sector. Keith was also the chairman of the drafting panel preparing British Standard *BS 8545 Trees: From Nursery to Independence in the Landscape*, which was published in February 2014.

## **Meaghan Eastwood**

Urban Ecosystem Service Valuation and Planning – Seeking a More Equitable and Inclusive Approach

This presentation will explore some of the environmental justice concerns facing greenspace managers and citizen advocates in the Greater Toronto Area. A focus will be placed on the drivers of inequitable access to greenspace, the paradox of making neighbourhoods "just green enough", and the potential decision-making making tools that can be used to support more inclusive and fair greenspace governance.

Meaghan is a Senior Research Scientist in the Research and Knowledge Management Section of the Toronto and Region Conservation Authority (TRCA). Meaghan has coordinated and co-authored urban forest studies and strategies for municipalities across the Greater Toronto Area and has provided expertise to a range of strategic level initiatives at TRCA, including corporate strategic planning, ecosystem services valuation, and community-based urban forest planning and stewardship. Meaghan is currently pursuing a PhD in Social and Ecological Sustainability at the University of Waterloo. Her research applies the tools and concepts of ecological economics to urban environmental justice challenges.

## Henrik Sjöman

Discovering Successful Urban Trees – 21st Century Plant Exploration

Trees contribute a range of ecosystem services to urban environments. However, the magnitude of their contribution is related to their physiological condition and capacity to persist within towns and cities. This requires that species are matched to their planting sites and that their vulnerability to pests and diseases is assessed.

Most urban areas today incorporate a limited range of tree species in their urban forests. There is a reluctance to use less-known or non-native species, which affects the production-demand from tree nurseries. This situation limits tree diversity and reduces the overall resilience of the urban treescape to disturbances such as pests, diseases, and climate change. Therefore, increasing the use of currently under-utilized species is an important part of enhancing urban resiliency and enhancing urban forest ecosystem services.

In the presentation by Henrik Sjöman, several examples of ongoing research will be presented, including the monitoring and evaluation of a large number of frequently used and less common tree species for their ability to grow in different urban environments and their capacity to deliver benefits. Much of the research is based on field studies in the trees' native and natural environments, where first-hand information supports a sound platform for further assessment. The presentation will highlight experiences from North America, China, Romania, Azerbaijan, the Republic of Georgia, and other locales, with the objective of discovering the successful urban trees of tomorrow.



Henrik "The Tree Hunter" Sjöman is a senior researcher at the Swedish University of Agricultural Sciences and Scientific Curator at Gothenburg Botanical Garden. Henrik's work is mainly focused on developing knowledge of site-adapted plant use for urban environments. How the capacity of different trees will vary in context to its urban environment and in delivering ecosystem services, and how to expand knowledge about diversifying the urban treescape, have become the prime drivers of Henrik's work. Finding the "trees of tomorrow" means combining traditional plant hunting of less-common species with research and evaluation; creating a diversified approach to a resilient urban forest.











#### **Ted Green MBE**

Why Care for Old Trees?

In modern cities today we all benefit from our forebear's vison to plant trees in urban settings. Our knowledge and experience on how to care for trees increases day-by-day. While we strive to expand the future urban forest we must also work to preserve what we have.

Old trees are living monuments, part of our history and cultures, reservoirs of biodiversity, and gene banks for the future. Perhaps above all, they provide essential biological continuity for soil communities that we still know so very little about. Ted's talk will update the audience on projects that are under way on both sides of the Atlantic to preserve seed, graft twigs from ancient trees, and plant tomorrow's ancients. Their future is in your hands.



Ted Green is founding member and President of the Ancient Tree Forum and Honorary Vice President of the International Tree Foundation. He was honoured as a Member of the Most Excellent Order of the British Empire (MBE) in recognition for his work in conservation, especially of trees and fungi. He was also awarded an honorary lectureship by Imperial College, University of London for his outstanding contribution as a technician to science and education, and was given the Arboricultural Association Annual Award for his services to arboriculture. Recently, Ted was awarded the prestigious Gold Medal by the Royal Forestry Society. In 2006, Ted was named one of the "Earthshakers: the top 100 green campaigners of all time" by the UK's Environmental Agency and The Guardian newspaper.

Ted has worked for Natural England as Conservation Liaison Officer to the Crown Estates at Windsor and later became and remains their Conservation Consultant. Ted is a regular writer and broadcaster and speaks frequently at international conferences on ancient trees, pollards, wood pasture and parkland and fungi.

## Philip van Wassenaer

Conference Host: Welcome Address and Moderator

Philip is the principal consulting arborist and founder of Urban Forest Innovations Inc. (UFI) and Urban Forest Innovative Solutions Ltd. (UFIS). He has over 25 years' of arboricultural experience, and is an ISA Certified Arborist and a member of the American Society of Consulting Arborists (ASCA). His academic qualifications include an undergraduate degree in Environmental Sciences and a Master of Forest Conservation (MFC) from the University of Toronto. In 2009, Philip received the ISA "True Professionals of Arboriculture" award in recognition of his commitment to education and the advancement of arboriculture.



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# Registration by mail

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Organization:	Additional Attendees
Address:	Required fields for each additional registrant
City:Prov/State:Postal Code/Zip: Phone:Email:	Email:
Dietary Restrictions (if any)	Dietary Restrictions Name:
Regular Registration         #@ \$425.00       \$	Email:  Dietary Restrictions
Full-Time Student Registration (includes meals as listed above)  # @ \$185.00 \$  HST 13% \$  Total \$	Email:

## Enclose a cheque for the total due, payable to Urban Forest Innovative Solutions

Mail this form and cheque to: Urban Forest Innovative Solutions

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**Questions?** 

Contact us at: 905-274-1022

or email <u>info@ufis.ca</u>



