Urban & Peri-urban Forestry

History, concept and importance

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Outline

• Historical development of urban forestry
• Urban forestry defined
• A European flavour of urban forestry
• Why is urban forestry important?
• Introduction to the workshop
Historical perspective
Urban and peri-urban forestry history

- Medieval times: utilitarian woodland
- Renaissance: wooded landscapes for the powerful and rich
- Industrialisation: urban green space for the masses
- Modern times: (local) government provides wooded landscapes for multiple benefits
City forests

• ‘Most cultural’ forest landscapes
• Stadsbos, Stadtwald, Kaupunkimetsä, byskov, ...
• Traditionally: forest owned / managed by certain city
• Then: forest in or adjacent to city, closely linked

Source: Schama (1995)
Over London by Rail - [en:Gustave Doré](https://en.wikipedia.org/wiki/Gustave_Dor%C3%A9) c 1870
(source: Wikipedia)

Machine Room in Richard Hartmann’s Chemnitz Factory (1868) - © Deutsches Historisches Museum Berlin
The history of Marabou Park

Marabou Park was commissioned by Marabou’s founder Henning Thorne-Holst as a recreational park for the employees of his chocolate factory and contains an impressive sculpture collection.

The park was ingeniously conceived and created on a hectare of once unpromising terrain by Sven Hermelin (1900-1984), a key figure in Swedish landscape architecture. Hermelin worked on the grounds for eighteen years, from 1937 until the park was opened to the public in 1955. The park’s undulating scenery and individually landscaped settings were in many cases created especially for the sculptures. Marabou Park is widely considered to be one of Sven Hermelin’s most important works and carries his trademark - an effortless fusion of nature and art.

Radio Reporter P1 Oct 13 2005
Map: City of Amsterdam
‘Green space failures’

• High pressures and hunger for urban land
• High maintenance costs vs. falling public budgets
• Ageing parks, vegetation
• Diseases (e.g., Dutch Elm Disease)
• Changes in society, e.g. ‘democratisation’
• Wrong political decisions, design, etc.
• Focus on establishment, not maintenance
Urban forestry defined
REPORT
OF THE
GENERAL SUPERINTENDENT OF PARKS.

CAMBRIDGE, December 1, 1894.

To the Board of Park Commissioners of the City of Cambridge:

GENTLEMEN: — I have the honor to present my first annual report as General Superintendent of Parks, covering the period from the date of my appointment, March 1, 1894, to the present date.

SHADE TREES.

For many generations the shade tree upon the streets of Cambridge have been the pride of residents and the admiration of visitors. Now much our city is indebted to its trees, not merely in the matter of adornment but for utilitarian reasons as well, it would be difficult to state. Cambridge, in contrast with some of the neighboring cities and towns, has few natural opportunities for fine landscape effects; but in the extent and beauty of its foliage and in its magnificent specimens of native trees, our city, in the past, has offered an attraction to home-builders which has been a small factor in the city's growth. While we would search in vain upon the assessors' lists of public property for an inventory of the shade trees, it would not be a difficult task to show that, collectively, these trees are among the most valuable of the municipal properties. Large as the amount is which has been recently appropriated for park development in Cambridge, this sum comes far short of representing the value of the city's foliage already established. A discussion at some length upon the present condition and needs of the public shade trees may not, therefore, be deemed out of place, especially when it is considered that no extended official report has ever before been presented upon this subject.

By the ordinance established March 13, 1894 (Sec. II.), it is ordained that "the Park Commissioners shall have the care of the trees in the public streets." Prior to this date, as far as the public records show, the street-department has been the custodian of the public trees. Why this arrangement was made in the beginning, and why it was for so many years continued, is not apparent. But that the art of urban forestry—"the art requiring special knowledge, cultivated taste, and a natural sympathy with plant-life—should have been made an adjunct of the strictly mechanical business of road building, shows that the governing powers in the past have been largely indifferent in the matter of shade tree cultivation. Indeed the city corporation has done but little to foster our shade trees, and that little has been done without system. We must look to quite a different source to account for the care bestowed upon Cambridge trees in the past. Intimations of this may be seen in the literature of Lowell and Longfellow and others, and the service those eminent Cambridge citizens have rendered in creating and maintaining a discriminating sentiment for tree culture in their home city, is beyond calculation. As long as the Cambridge classics are read, Cambridge trees will be fondly regarded. And to this high work must be added the valuable services rendered in the past by the numberless citizens who, although without the power to charm a listening world, have given individual effort to tree culture upon our public streets, and have never failed in voice or act, to come to the defense of our lovely inheritance whenever it was assailed by men of 'aristocratic instincts.'

But however valuable individual effort has been in the past, it is evident that the time has come when the matter of tree culture upon our public streets and reservations, must be made a municipal enterprise. The hard conditions of "congested" urban life are coming upon us. Gradually the surface of Cambridge is being encircled with factories and mills; the lawns which separated the buildings from the sidewalks are disappearing in the yawning entrances of modern structures. Streets of houses rise above the tree-tops; electric-light wires wither and kill the foliage above, while occupying grades suffocate the roots beneath. In the earth, on the surface, and above, the enemy of shade trees increase at an alarming rate, with the increase of city conditions. Thoughtful owners of houses around, who allow the appurtenances of a fifty-dollar animal to destroy a thousand-dollar tree. The size of

"A life of between two and three centuries seems a long one to a new country like ours, and 'the old elm' is often the most ancient monument of a New England village. I happen to be old enough to remember a number of old monumental trees in my native town of Cambridge, Massachusetts. When I first rolled my infant eyes toward the glare of that western sky as it flashed through the windows of my birth chamber, four green columns, each of them a forest towering on a single stem, as yet in view long afterward, prised themselves upon my vision through my blinking eyelids. One was an old pachys which fell, I think, rather to the great September Gale of 1815, or at least that then, but I remember its stump with a certain reverence. On the opposite side of the Common stood the 'Washington Elm,' now stunted, and soon to be lost in and overshadowed by the minute pines, oaks, and sycamores. One was a group chestnut which fell, only to the great September Gale of 1815, or at least that then, but I remember its stump with a certain reverence.

"—Oliver Wendell Holmes.
Urban forestry

The art, science, and technology of managing trees and forest resources in and around urban community ecosystems for the physiological, sociological, economic, and aesthetic benefits trees provide society

(Helms 1998, based on Miller 1997)
Key characteristics of urban forestry

- Integrative: *all* tree resources; urban and peri-urban; planning & management
- Strategic: long-term vision, multiple use
- Inter-/multidisciplinary: wide range of disciplines/fields
- Participatory: stakeholder involvement
- Urban: urban conditions; meeting urban demands
"Playing Field" of Urban Forestry

| The Urban Forest                                                                 |
|---------------------------------|---------------------------------|---------------------------------|
| Individual trees                | Tree groups and small woods (e.g. in parks) | Urban & peri-urban woodlands |
| Functions, policies, planning, and design | Technical activities, including selection and establishment | Management |


Credits: Thomas Randrup
A flavour of European urban forestry
SVERIGES FÖRSTA NATIONAL-STADSPARK

Ett historiskt landskap mitt i Stockholm

- Ulriksdal
- Haga
- Brunnsviken
- Djurgården
Nach uns der Urwald...
Cover of trees and shrubs in Munich

- 59% vegetated surfaces
- 17% cover of trees and shrubs
- 11% tree cover

Source: Duhme et al. 1990.
Green space in European cities

Source: Chapter 3 in the book, Pauleit S., et al., 2005
Urban forestry in Europe

- Initial interest in UK, Ireland
- From mid-1990s: true European attention
- 1997: COST Action E12 ‘Urban Forests & Trees’
- 1998: IUFRO European Forum on Urban Forestry
- 2002: Urban Forestry & Urban Greening (journal)
Importance of urban forestry
Important trends

- Globalisation of markets and values
- Demographic changes
- Lifestyle changes
- Information and entertainment society
- Changes in environment
- Urbanisation
‘Good’ cities
Kotkin (2005)

- Sacred
  - Religion, place connection, identity

- Safe
  - Safe and comfortable environment, quality of life

- Busy
  - Economy, culture, social life, transport

- Modern times: ‘ephemeral’ (entertainment) city
  - Need for strong base of committed citizenry + constructing the “diversions of essentially nomadic populations”
Importance of urban and peri-urban forestry today

- Social services, and especially recreation come first
- Environmental services are close second
- Often limited focus on production of goods

Photo: Rik De Vreese
“Competitive city regions are ones that can attract and retain viable businesses and their employees by offering a good quality of life”
(SAUL Partnership 2005)
Cities as challenging environments

- Biotic and abiotic conditions
  - Tree planting under difficult conditions
  - Harsh growing conditions – often man-caused
- Anthropogenic pressures (‘direct’)
  - Vandalism and mechanical damage
  - Overuse
  - Pollution
  - Infrastructure/urban development
- Societal developments
  - Changing politics, demands, economics
  - Conflicts, wars and crises
Workshop outline

- *Three briefing papers*
  - The physical resource
  - Benefits of urban and peri-urban forestry
  - Governance aspects
- *Five regional examples*
  - Austria, Italy, Slovenia, Sweden, England
  - Focus on innovative approaches
- *Two panel debates*