Woods in the Global Context



Katharine Thoday Thursday 19th January 2017

Outline

- 1. What are Urban Woods?
- 2. Global Trends
- 3. Valuing Woods in Urban Spaces
- 4. Opportunities for Local Engagement and Partnership



What are Urban Woods?

Green Infrastructure



What are Urban Woods?





THE HISTORY OF THE COUNTRYSIDE

The classic businey of Armans's lendmape, flore and frank

OLIVER RACKHAM

Global Trends – Rate of Deforestation

Causes of Greenhouse Gas Emissions by Sector

Source: IPCC (2014)





Global Trends – Causes of Deforestation & Degradation



Global Agreements



United Nations Framework Convention on Climate Change













Global Trends – Increased Urbanisation

"For the first time, more than half the world's population live in cities and towns. By extension, urban and periurban forestry is becoming the window through which people make judgements about all the worlds' trees and forests. We must ensure that cities, trees and forests grow together to meet the needs of urbanized societies and to convey the importance of all forests to life on our planet" (Eduardo Rojas-Briales, Head of the Forestry Department, FAO, Rome, November 2010)



Global Trends – Increased Urbanisation

- Green Infrastructure
- Urban Forestry and Woodlands Advisory Committee (FWAC) established by the Forestry Commission in 2014





Valuing Woods in Urban Spaces

- 1. Public Space access to green space
- 2. Health Benefits urban pollution
- 3. Climate Change Mitigation
- 4. Mitigate Soil and Water Degradation
- 5. Economic Benefits



Public Space – Importance of Urban Planning



William Holford (1907-1975) New Towns Corby (1950's) Brasilia Canberra Daniel Burnham (1846-1912) City Beautiful Movement Baguio (1904) Chicago Washington DC

Health

- 11-19 % lower prevalence of obesity in children compared with children limited or no access to green spaces (Dadvand et al., 2014)
- In USA trees help reduce or prevent more than 670 000 cases of severe <u>respiratory diseases</u> per year and thereby save more than 850 lives annually (Nowak et al., 2014)
- Birmingham is the UK's first Biophilic City and has declared its intent to be the United Kingdom's first "natural capital city"



Climate Change Mitigation

- One large tree can absorb 150kg of carbon dioxide a year
- Trees can cool cities by between 2C and 8C
- When planted near buildings, trees can cut air conditioning use by 30%



Rio de Janeiro - Brazil

Mitigate Soil and Water Degradation

- Properly designed shelterbelts estimated to reduce erosive force of winds by up to 75 % (Agriculture Victoria, 2003)
- 90% of sediments and nutrients can be prevented from entering waterways by maintaining strips of riparian vegetation (Schultz, Isenhart and Colletti, 2005)
- Since 2006, Philadelphia has reduced combined sewer overflow and improved water quality through green infrastructure policies and projects, saving approx. US\$170m (Boyle et al., 2014)



Economic Benefits

- Trees estimated to on average increase the value of property by 20%.
- In 2014 City Fruit harvested 12 700 kg of fruit from Seattle's urban fruit trees and donated it to 39 local groups.
- When the New York City park department measured the economic impact of its trees, the benefits added up to \$120m a year. (Compare that to the \$22m annual parks department expenditure.)



Importance of local engagement



Baguio – Philippines – Marriage License



PLANTING AS PRE-REQUSITE BEFORE ISSUANCE OF MARRIAGE LICENSE

COUPLES INTENDING TO MARRY IN THE CITY OF BAGUIO SHALL BE PREVAILED UPON TO PLANT AT LEAST ONE (1) TREE AT A PLACE DESIGNATED BY THE CITY ENVIRONMENT AND PARKS MANAGEMENT OFFICE (CEPMO) BEFORE THE ISSUANCE OF THEIR MARRIAGE LICENSE. CEPMO SHALL SUPERVISE THE PLANTING OF TREES AND SHALL CERTIFY THEREAFTER TO THE OFFICE OF THE CIVIL REGISTRAR THAT THIS PROVISION (ORDINANCE NUMBERED 18, SERIES 2016, ARTICLE 35: MANDATORY PINE TREE PLANTING) HAD BEEN COMPLIED WITH, WHICH CERTIFICATION SHALL BE A PRE-REQUISITION BEFORE A MARRIAGE LICENSE SHALL BE ISSUED.

- THE COUPLES SHOULD BRING WITH THEM ONE(1) PINE TREE SEEDLING FOR PLANTING



Lyon – France – Tree Charter



Multi-sector participation

- Reach beyond the green sector for joint work on urban trees
- Enhance the integration of trees in local plans
- Standardise the adoption of a holistic approach to project costing



encourage a collaborative approach across the planning, design and engineering professions Create and promote income generation through the management of urban woodlands and green spaces

- Promote agroforestry projects.
- > Develop projects to develop local wood fuel supply.
- Create/maintain green areas providing an attractive setting for new developments, particularly in less attractive areas targeted for regeneration.
- Solidarity Trees private sector sponsorship



Chiang Rai – Thailand



Increasing Understanding – Building Evidence Base



Helps communities strengthen forest management and advocacy efforts by quantifying structure of trees and forests, and the environmental services trees provide.

<u>Treezilla</u>

Objective to create an online map of all trees in UK to be used for: Education, Outreach, Research, Inventory and Biological Surveillance.

Observatree

Citizen science project engaging communities in identifying and reporting tree pests and diseases to maximise the chances of eradicating or controlling outbreaks. What's important to you about the woods in Corby?

Do you know the scale and value of your urban forest?

Do you have a target to increase tree and canopy cover in your town or city?



Useful websites

Trees and Design Action Group - http://www.tdag.org.uk/

i-Tree – <u>http://www.itreetools.org/</u>

Treezilla – <u>http://www.treezilla.org/</u>

Observatree – <u>http://www.observatree.org.uk/</u>

UCLG Committee on Urban Strategic Planning - <u>https://www.learning.uclg.org/public-space</u>

Woodland Trust – Tree SOS boxes

