



# Introduction to the University of Copenhagen and 'Forest & Landscape'





# UNIVERSITY OF COPENHAGEN



Newly renovated Botanical Garden  
FOR THE PUBLIC AND THE PRESERVATION OF OUR NATURAL HERITAGE

## News »

Cause of diabetes may be linked to iron transport  
Researchers have shown that the increase of one particular iron-transport...

New strategies needed to combat disease in developing countries  
Research suggests that dividing campaign for combating either non-communicable or...

Birth is no reason to go to hospital  
A new Cochrane Review concludes that all should consider establishing proper...

Read more news

## Education »

- International Students  
Studies and services
- Continuing Education  
Professional Masters
- @resund Campus  
Studies in the @resund region

## Research »

- PhD Programmes  
Links to faculties' pages
- Business Collaboration  
Licensing, R&D, Recruitment
- Research Database  
Specific research areas

## Employment »

- Job Portal  
Vacancies, Personnel Policy
- International Employees  
Working conditions
- CPH international service  
Moving to Copenhagen

## University »

- Introduction  
Facts, ranking and history
- Management  
Board, Rector, administration
- Slideshow  
Pictures of the University



## Some key figures

- Close to 38,000 students – more than 6,000 foreign students
- Close to 3,000 PhD students
- Over 7,000 members of staff
- 8 Nobel laureates
- QS World University ranking: 51 (and 13 in Europe)





# Organisation

- Faculty of Health and Medical Sciences
- Faculty of Humanities
- Faculty of Law
- Faculty of Social Sciences
- Faculty of Theology
- Faculty of Science (new after merger)
  - Includes former Faculties of Life Sciences and former Faculty of Science





# Faculty of Science

- 12 Departments, e.g. Biology, Food Science, Plant and Environmental Sciences
- One of these: Department of Geosciences, Natural Resources and Planning
- Includes former 'Forest & Landscape'





# Forest & Landscape

- Forest & Landscape is a national centre for research, education and consultancy services within forest and forest products, landscape architecture and landscape management and also urban planning and design.
- Scientific fields:
  - Forest
  - Forest products and greenery
  - Park and landscape
  - Nature and landscape management
  - Planning
  - Outdoor recreation and tourism
- Approx. 300 employees
- One of its Divisions: Parks and Urban Landscapes





# SUFAREL retraining programme

- Day 1: University of Copenhagen – information about higher education, QF
- Day 2: Municipality of Copenhagen – focus on green space management issues, needs, role of professionals
- Day 3: University of Copenhagen, Forestry College and Grib Skov – e.g. focus on forestry in Denmark, LLL
- Day 4: Skovskolen, Therapy Garden Nacadia, Louisiana – e.g. nature and health, nature interpretation, forest recreation





FOREST & LANDSCAPE







# Denmark and the QF system

Examples from landscape architecture and  
green space management

Prof. Dr Cecil C. Konijnendijk  
*cck@life.ku.dk*





# Outline

- European QF
- Context of green space management
- Green space education and Landscape Architecture Master at KU
- Example: 15 ECTS course 'Urban Forestry & Urban Greening'



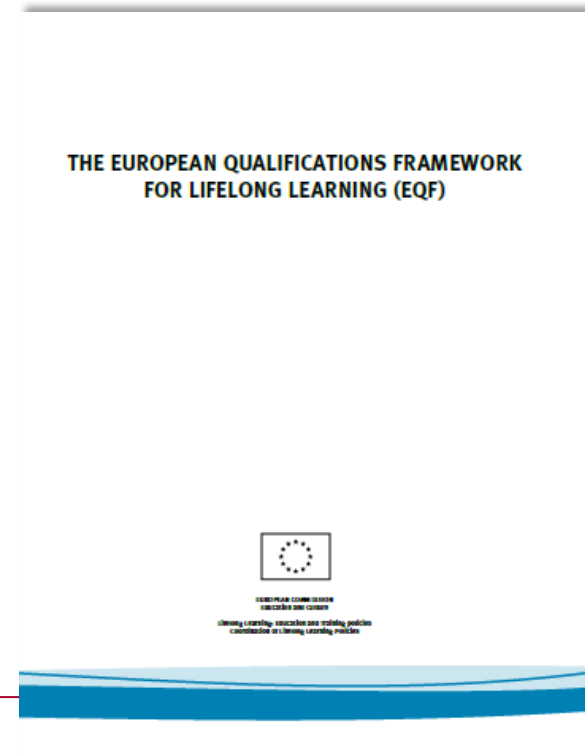


# European QF: knowledge

“Knowledge” means the outcome of the assimilation of information through learning.

Knowledge is the body of facts, principles, theories and practices that is related to a field of work or study.

In the context of the European Qualifications Framework, knowledge is described as theoretical and/or factual.





# European QF: skills

“Skills” means the ability to apply knowledge and use know-how to complete tasks and solve problems.

In the context of the European Qualifications Framework, skills are described as cognitive (involving the use of logical, intuitive and creative thinking) or practical (involving manual dexterity and the use of methods, materials, tools and instruments)





# European QF: competence

“Competence” means the proven ability to use knowledge, skills and personal, social and/or methodological abilities, in work or study situations and in professional and personal development.

In the context of the European Qualifications Framework, competence is described in terms of responsibility and autonomy.





# Landscape architecture & green space management

- Employment in private sector (LA firms), local authorities, university and others
- Traditional focus on *skills*, apart from knowledge
- Only during recent years: more scientific approach
- Changing societal needs for graduates





# A different view on cities

- Urban ecology
- Sustainable urban development
- Urban footprint
- Urban resilience – e.g. in adapting to climate change





# 'Urban 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)
- Impacts of climate change
- Call for more public involvement
- Wrong political decisions, design, etc.
- Focus on establishment, not maintenance







# Cities as challenging environments for trees and forests

- Biotic and abiotic conditions
  - Tree planning in cities typically 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

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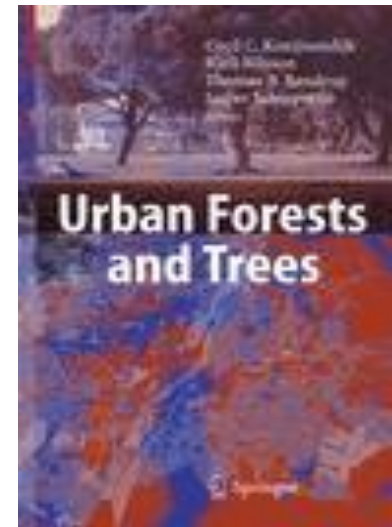


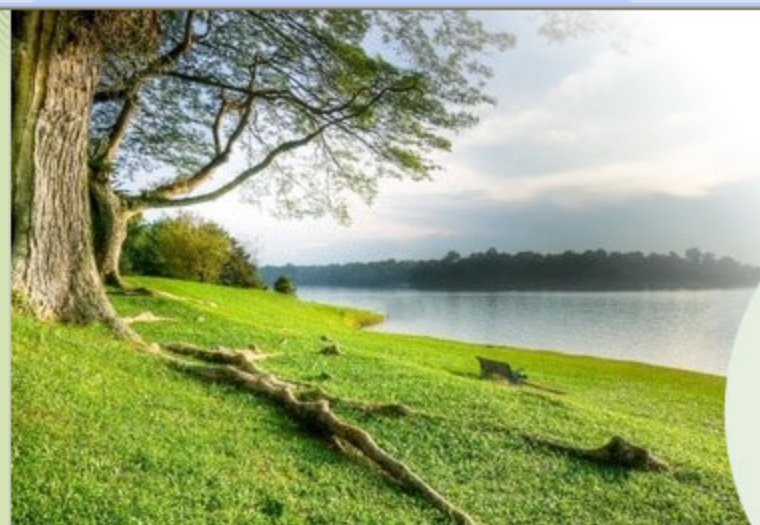
NEW YORK IN A FEW YEARS FROM NOW  
(A prophecy of 1881)



# 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





Workshop - **25-26 March 2009** Brussels,  
DG ENVIRONMENT, Beaulieu 25



# Towards

## a green infrastructure for Europe

*Integrating Natura 2000 sites into the wider countryside*

[Home](#)
[Programme](#)
[The workshop](#)
[Venue](#)
[Proceedings](#)
[Background](#)
[Contact us](#)
[EC study](#)

## Green infrastructure

The need for healthy ecosystems is now widely recognised, not just to halt the loss of biodiversity, but also to benefit from the many valuable services they provide. An essential condition for healthy ecosystems is the maintenance of ecological coherence. However, habitats throughout Europe are becoming increasingly fragmented. Many initiatives are already playing a role in tackling this issue, such as the Natura 2000 Network. But, given the scale of the challenge, more needs to be done to build an ecologically coherent

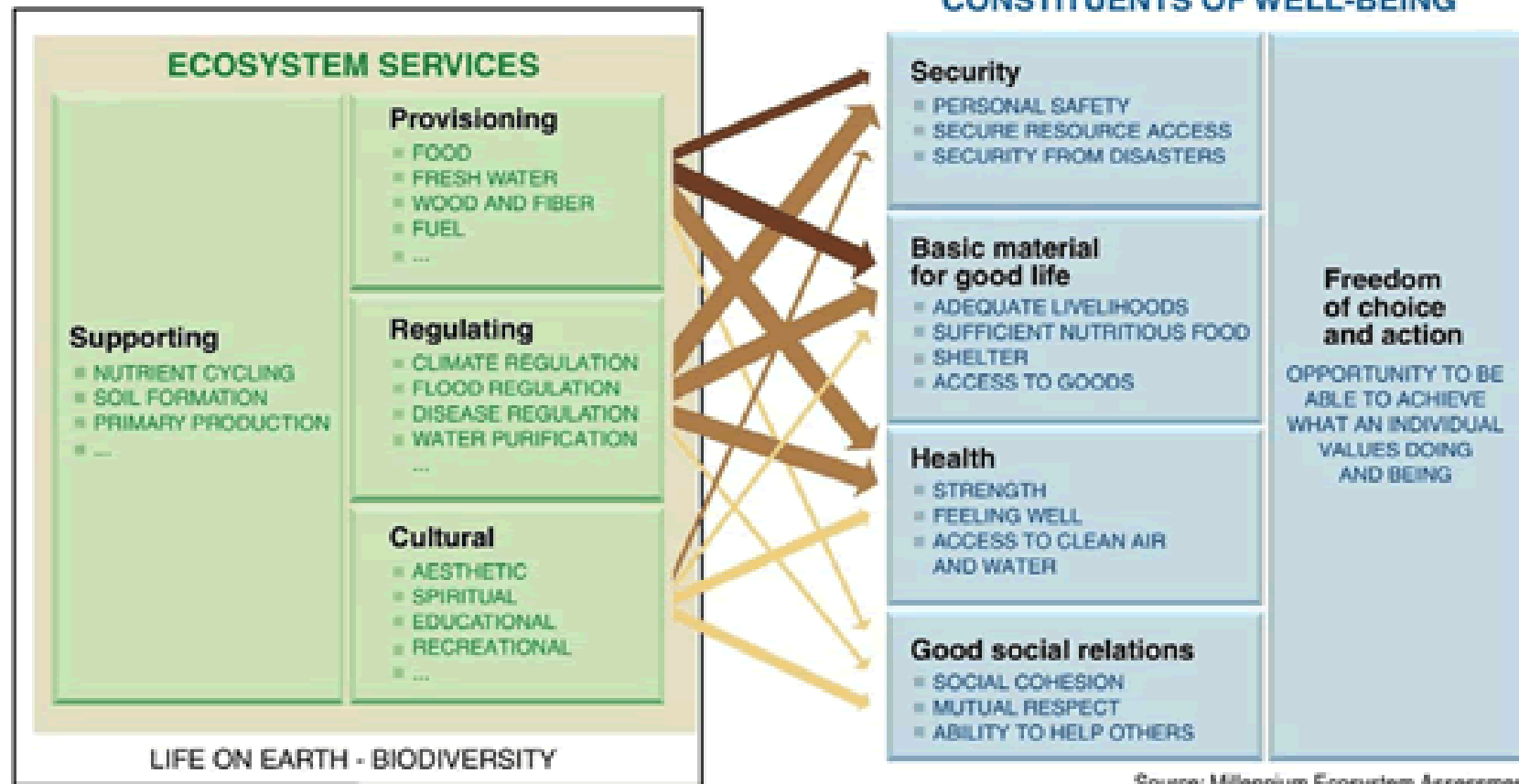
## Purpose of workshop

Against this background, the main aims of the workshop were to determine an appropriate Community response to these developments and to identify the actions that would be most effective at EU level. The aim is to build on the experiences of existing initiatives across Europe. The conclusions will contribute to further thinking on how a Green Infrastructure for the European Union could be shaped and

## Latest News

- The workshop proceedings are now available, to download [click here](#)





Source: Millennium Ecosystem Assessment

**ARROW'S COLOR**  
Potential for mediation by socioeconomic factors

- Low
- Medium
- High

**ARROW'S WIDTH**  
Intensity of linkages between ecosystem services and human well-being

- Weak
- Medium
- Strong





# Governance

- Focus on role of non-state actors in politics and the assumption that they become influential over policy
- Governance by / with / without government
- Governance *with* government: boundaries between and within public and private sectors have become blurred

Source: Kleinschmit et al. (2009)







# Green Space Award

[Om Green Space Award](#)

[Introduktion](#)

[Ansøg om Green Space Award](#)

[Kvalitetskriterier](#)

[Dommergerning og regler](#)

[Tildelte Awards](#)

[Organisation](#)

[Presse](#)

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**For partnerskabet**

[Logbook and announcements](#)

## Green Space Award til Aalborg



Stadsgartner Kirsten Lund Andersen modtager Green Space Award-diplomet af dommerformand, landskabsarkitekt Martin Tranholm Frøst.

[Bliv dommer - Se her](#)

### Announcements

- 12. - 14. september 2012  
Danske Parkdage i Aalborg
- April - Oktober 2012  
Floriade, Greenpark Venlo i Holland
- 9. november 2012  
Bytræseminar, Skov og Natur

### ANSØGNINGSFRISTE

- 15. januar 2013
- 15. maj 2013

### Green Space Award

KPN-formand Lene Holten har oplæg om Green Space Award på IFPRA-konferencen i Breda september 2012. [Læs mere](#)



# Requirements regarding knowledge, skills and competences

- Transdisciplinary and interdisciplinary approaches
- Evidence-based design
- Strategic thinking
- Communication and branding
- Socio-cultural, ecological and economic aspects
- Still also come 'traditional' core knowledge





# The green space manager – a profile

- Landscape architect (or maybe a forester), with interest in management aspects
- Specific interest in social and urban issues
- Skills, 'mindset':
  - open, communicative
  - can operate in a highly political setting
  - creative, flexible, innovative
  - science-based approaches
- High level of competence – natural resource management in urban settings







# Green space management in Danish education (1)

- Park Diploma (vocational)
- Engineer in Garden- and Park management (specialised)
- Forest and Landscape engineer (some aspects included)





# Green space management in Danish education (2)

- Master in Landscape Architecture
  - Specialisation on 'green space management'
  - Thematic course (15 ECTS) on urban forestry & urban greening
  - Additional courses, e.g. Design by Management, Conflict management, Master thesis
- Master education in Forest & Nature Management
  - Option for taking 'urban forestry'-style courses
- PhD-studies





# The Danish way of teaching

- As a student in Denmark you will be encouraged to play an active role in the learning process.
- Apart from studying on your own and attending lectures you will take part in group work, engage in projects with other students, and participate in open discussions.
- Danish higher education is characterized by its innovative teaching methods and its informal learning environment, which is designed to promote creativity, collaboration, personal expression, analytical and critical thinking





# Landscape Architecture (Master)

The MSc programme in Landscape Architecture combines *creative disciplines and scientific knowledge* with an understanding of society.

As a landscape architect and urban planner, you *work* with designing anything from local beach parks, harbour transformations and green urban areas to overall landscape planning.

You *know* the conditions governing the development and structure of the cities and regions and are able to plan, design and manage parks and green areas.





# Landscape Architecture (Master) - 2

And you work analytically and creatively to create unique architecture and perfect solutions for urban and rural areas, resulting in stimulating, well-functioning and sustainable surroundings for people in the future.

As a graduate from the MSc programme in Landscape Architecture, you will also have the *competences*, for example, to:

- Propose hypotheses and analyse, programme and plan the development of green spaces
- Evaluate the quality of landscape architecture projects – both your own and those of others
- Take a spatial, social and artistic approach in a variety of contexts





# Urban Forestry & Urban Greening

- Ca. 30 students per year – from across the world
- Strategic view on green space management
- Interactive, e.g. developing a park management plan
- Topics covered during the course:
  - Concept, history, benefits of UFUG
  - Governance, policies and planning
  - Branding, communication, public involvement
  - Management and maintenance
  - Implementation of UFUG





# UFUG learning outcomes

## Knowledge (examples):

- Describe relevant theories related to the combination of public administration and strategic green space management
- Describe, using relevant models, the actors and aspects involved in urban green space management, and specifically explain the role of a public manager within a basic democratic system.
- Reflect about the different user groups, their wishes and needs, and possible conflicts between different user groups
- Describe the different organizational levels in a typical green space management organization, including the roles of the different parts of the organization.
- Summarize the various benefits of urban green space.
- Describe in detail how a strategic Green Space Management Plan may be structured, and developed.





# UFUG learning outcomes

## Skills:

- Read and analyze peer-reviewed scientific publications
- Make oral presentations of preformed analyses, developed visions and planned actions
- Structure reports and presentations in a correct manner
- Select and assess relevant information for the course project
- Discuss central tools, their scope and values in relation to green space management.
- Discuss the most important urban green space benefits in detail.
- Develop a Green Space Management Plan, including both short and long term visions and related means to fulfill the plan.







# UFUG learning outcomes

## Competences:

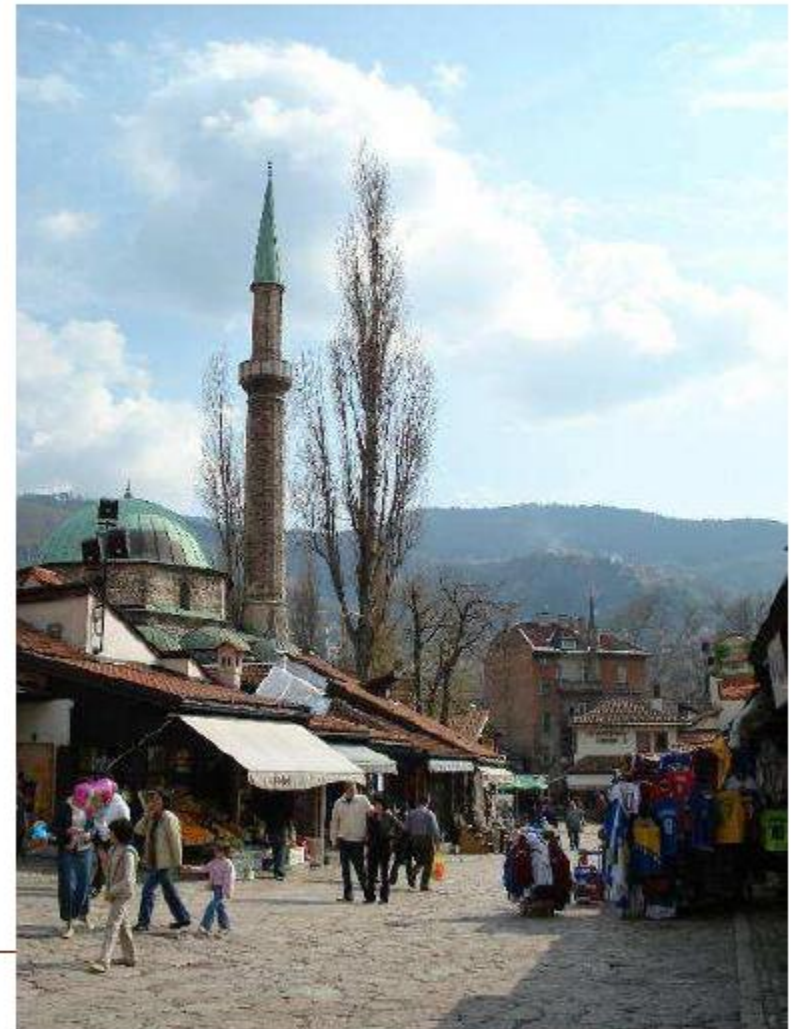
- Work independently
- Cooperate effectively in a multidisciplinary and multicultural group with a common project
- Apply the course theory to related subjects and/or to different work situations, e.g. in other countries





## Expected number of hours per activity

Lectures (1 lecture is 2 x 30 minutes)	60 hrs
Exercises	30 hrs
Project work with supervision	90 hrs
Discussion of literature	10 hrs
Exam	1 hr
Own preparation	225 hrs
Total	416 hrs





## Main learning objectives

- Understand and describe the characteristics, roles and complexity of UFUG at different levels, from strategies to implementation.
- Apply your own professional background and knowledge to the interdisciplinary context of UFUG.
- Be able to prepare a strategic management plan for green space, in collaboration with colleagues from different backgrounds as well as other stakeholders.





