



## **WG meeting 1-2 June 2015 Nice (France)**

### **WG1: Environmental services of GI and UF and implications of climate change**

Leader WG1: Roeland Samson

To enhance the collaboration and the efficiency of the huge WG1, the whole group was divided in 4 sub – working group. Each sub-group focused on specific topics, and aimed to the creation of dedicated publications.

#### **Sub Working Group 1**

Leaders: Ruediger Grote and Didier le Thiec

Two papers are being prepared: “Traits of urban trees in relation to their air pollution mitigation potential: A holistic discussion” led by Ruediger and “Can trees reduce the CO2 concentration in the cities?” led by Didier.

The discussion was based on the corrections to be taken for the Ruediger’s paper (in quite advanced form) and on the structure to be considered for the Didier’s paper (still to be started)

#### **Sub Working Group 2:**

Participants: Jorge H. Amorim (Portugal - Sweden); Jelle Hiemstra (The Netherlands); Hadas Saaroni (Israel)

Urban green and the UHI (Urban Heat Island)

– Review of research approaches and outcomes in different climatic regions

1. Motivation for UHI mitigation (Hadas)
  - Growing cities and density. Present and future projections.
  - Climate change projections.
  - UHI
2. Introduction
  - UHI as a problem in most climatic regions, even in north latitudes. (Jorge)
  - The role of green infrastructure (general overview, focusing on the point the climate is only one of many other aspects, sometimes a minor one). Climate and vegetation: a broad perspective including not only urban forests but also green infrastructures, focusing on trees (Jelle)
  - Aims of this paper (Jelle)
3. Research approaches (Richard)
  - Presenting the methodological scheme (based on the excel file)
  - Spatio-temporal resolutions (different climatic regions, seasons, scales)

4. Case studies analysis
  - 4.1 Northern latitudes (Sweden)
  - 4.2 Western and central Europe (Netherlands, France, Slovenia)
  - 4.3 Mediterranean (Portugal, Israel)
5. Discussion
  - Integrate the data based on the individual countries survey focusing on similarities against differences
  - Remaining questions
6. Conclusions
  - General guidelines for mitigation of UHI through urban forests & urban green infrastructure
  - Further study needed

### **Sub Working Group 3:**

Participants: Rocio Alonso Del Amo (Spain); Rudiger Grote (Germany); Tine Ningal (Ireland); Roeland Samson (Belgium)

#### Creation of Urban Trees inventories:

- Collection of several inventories and indicators from European cities
- Inventories are collected by research centers and Universities
- The main aim is to have a complete information set about the 20 most important (mainly used) tree species in European urban areas
- → Lack: Indication of use of tree species, except for street trees.
- Expected outcome: indication on use in urban areas of certain species; comparison among different urban environments

### **Sub Working Group 4:**

Participants: Lucian Dinca (Romania); Lina Straupe (Latvia); Abhishek Tiwary (UK); Violeta Velikova (Bulgaria); Urša Vilhar (Slovenia)

Paper 1:

Lead: Abhishek Tiwary. Coauthors: Lucian, Ursa, Miglena, Lilit, Martin, Lina, Vladimir, Maria ...

Agreed on a revised title for the paper: *“A pan-European review of the regional trends in utilization of urban trees on provisioning services”*

- Developed a list of highlights and potential infographics to be included in this paper
- Scope of provisioning: Woody biomass (timber/energy); Food; Non-timber forest products (NTFPs); Fungi; Forest floor; Water restoration/replenishment; Noise; Soils (nutrient balancing/restoration/ecosystem contamination); Building preservation

- Conducted a fresh review of additional literature
- Plans to meet in Ljublyana (Slovenia) for small group meeting to discuss/finalise the Results for the two papers – proposed 21-22 Sept 15
- Target dates: Develop next draft and share within the contributors: July end, 2015;
- Finalise analyses: Sept end, 2015
- Final manuscript for submission to journal: Nov end, 2015

#### Paper 2:

Proposed title: “Developing a pan-European understanding for enhancing the potentials for underutilized provisioning ecosystem services from urban and peri-urban forests/”

Lead: Miglena Zhiyanski ([zhiyanski@abv.bg](mailto:zhiyanski@abv.bg)); Coauthors: Lucian, Abhi, Martin, Ursa, Lina, Vladimir, Maria...

**AIM:** to analyse the potential of urban and peri-urban forests to provide nutrition (biomass), materials (water, biomass, other resources), and energy (biomass-based energy sources, abiotic energy sources) and to identify underutilised services provided by forests based on the real state of urban ecosystems in selected case-study regions.

Contributions: Case studies discussed – availability of data...

Table with indicators for urban ecosystems state and ESs provided by GI (forests) – focus on provisioning ESs.

Expected results: state of urban ecosystem defined, case studies provisioning ESs defined – comparative analyses, real provisioning of ESs assessed and potential to improve outlined... policy recommendation.

Deadline for contributions: mid of November

## **Working Group 2**

### **Nice Meeting minutes**

**1-2<sup>nd</sup> June 2015**

#### **Task Group 1: Linking GI characteristics with perceptions & socio-cultural ESS**

A systematic review of literature has been undertaken and a journal paper is currently in development. Good progress was made and an STSM will be undertaken later in 2015 by the lead author to further develop and finalise the work.

#### **Task Group 2: Socio-cultural ecosystem benefits of green infrastructure and urban forestry in Europe**

TG2 focused on 1) a paper on socio-cultural benefits of GI and 2) development of a draft outline for a chapter on access and accessibility of GI.- the outline is given below.

#### **Draft chapter outline**

*Draft title: Social and environmental justice: diversity in access to and use of GI*

#### **Outline**

This chapter will explore the social distribution of benefits derived from cultural ecosystem service provision to outline what sections of society have access to and benefit from accessing urban green infrastructure and which sections of society do not have access. We will draw on two sets of case study data. The first will focus on a sample of countries that have surveys of a nationally representative sample of the population that access and benefit from nature; this will include people accessing both urban and rural nature spaces. However from these surveys we will draw out any results and conclusions that focus specifically on access to urban GI. The second set of case study data will focus on surveys of local populations visiting urban and /or peri urban GI. From the case study data we will draw on the following:

- Availability (spatial availability of GI near to where people live)
- Use of GI by:
  - Socio economic status
  - Level of education
  - Ethnicity
  - Disability
  - Gender

The chapter will be set within a context of social and environmental justice, potentially highlighting if there are particular sections of populations in different European countries that are not accessing urban GI and identifying what the potential reasons for this might be. It will conclude with some implications and suggestions of how all sectors of society might be encouraged and enabled to access and benefit from urban GI.

## **Potential structure of book chapter**

### **Introduction**

- Sets out the context i.e. wide range of benefits gained from cultural ecosystem services but not everyone is gaining those benefits.
- Outlines from some key existing literature on the range of benefits gained and by which sectors of society
- Outlines some sectors of society that do not gain these benefits
- Outline reasons that benefits are not realised for some group
- What is the availability of access to nature / urban GI at European level.
- Draw on issues of social and environmental justice

### **Case study data**

- Drawing on case study data from XX countries
- Focusing on two types of case study
  - National survey
  - Local surveys
- Identifying benefits to which group and groups who are not benefiting
- Drawing on data in last decade or more recent data
- Each country to state whether people have a legal right of access to

### **Experiences from different European counties**

Section from our case studies on which groups in society are gaining benefits from accessing nature /urban GI

Section on which groups in society are not gaining benefits

Produce figures / tables to represent data (one table could show which country collects with type of demographic data in their surveys)

### **Policies that encourage access by diverse groups**

Examples from each country of any policies that encourage or enable diverse groups to access nature / urban GI. These could be national or local policies.

## **Discussion section**

Why are some groups benefiting and some are not

- Identification of interventions / programmes / campaigns that try to reach out to the groups not benefiting
- Identification of other ways of engaging the excluded
- Implications for land /site managers e.g. they might think about designing interventions to attract excluded groups, they might think about design of their sites so that it includes facilities that might attract the excluded, they might engage directly with communities to encourage use, they might improve the maintenance and social care of nature / urban GI in areas whether there are problems with litter vandalism etc.

## **Task Group 3:Role of GI in tourism**

Progress was made on the development of a paper, with data being gathered from approximately 10 countries. A chapter development was also discussed and a draft outline is given below.

### **Chapter on Tourism and GIs**

(Lead author: Theano S. Terkenli)

#### **ABSTRACT**

Urban Green Infrastructures respond to and serve both inhabitants and visitors' needs. In order to understand and assess the ways that tourists relate to urban GIs and urban forests in the cities they visit, a cross-cultural comparative study of tourists' perceptions of GIs was conducted in various European cities. The study was carried out with the aid of social-scientific methodologies, using an extensive interview questionnaire, administered to tourists/users of GI, supplemented with interviews of stakeholders and experts on their evaluation of the importance of urban GI for tourism. The survey aimed at assessing and interpreting tourists' a) perceptions, b) attachments/ preferences, and c) practices/ behaviors vis-à-vis urban GIs in the cities or towns of their destinations. The interviews complementing the questionnaire complemented the questionnaire, by addressing to tourism stakeholders (i.e. tourism entrepreneurs, local authorities, etc) open-ended questions focusing on the study's research objectives, namely on their perceptions of the role and importance of UGIs in tourism.

The chapter comprises of three parts: a) theoretical background, b) selection and description of case studies and c) empirical research and results. The selection of case studies follows a roughly comparative logic (with

the exception of the inclusion of the UK), namely on-site questionnaire surveys which will have been completed in Nordic, Mediterranean and Central European/ Balkan countries.

#### **Task Group 4: Learning from good practice going wrong**

Twenty one examples from eleven countries were identified and analysis. A paper has been submitted by Sylvie Nail, Andrej Verlic to the journal Forestry called 'Avoid disappointment: learning from mishaps when planning and implementing green infrastructure projects.'

## WG3 MEETING

### **Sub-group 1: Physical resources (leader: Anders B. Nielsen)**

This sub-group decided not to meet in Nice, but instead to have a small group meeting immediately afterwards.

### **Sub-group 2: Collaboration and Partnerships (leader Ralph Hansmann)**

Present: Silvija Krajter Ostoic, Nerys Jones, Renate Spaeth, Ivana Zivojinovic, Ian Whitehead, Samira Benamar, Ulf Zimmermann, Ralph Hansmann

Because of the focus of the COST Action as a whole on the book on Urban Forestry & Green Infrastructure, the sub-group spent much of the time on this topic.

One option which was discussed was to use the paper "*Partnerships for Urban Forestry and Green Infrastructure: Delivering services to people and the Environment*", on which the sub-group has worked for a considerable time, as the basis for a sub-chapter of the book. This idea was rejected, as members of the sub-group want to produce an article for a scientific journal, as initially planned.

The decision was taken to write both a book chapter and the article. Ian Whitehead will take on the lead for the book chapter, with the preliminary title "*The role of partnerships and the Third Sector in the development and delivery of urban forestry and green infrastructure*", and Ralph Hansmann will keep the lead for the article.

The subsequent discussion and work of the sub-group focused on the content of both the article and the book chapter and resulted in preliminary abstracts and full draft versions of both. Consolidated preliminary versions of both documents will be ready by November 2015. This will be accomplished through collaboration via email, under the guidance of the lead authors.

### **Sub-group 3: Policies (leader: Natalie M. Gulsrud)**

Present: Alan Simson, David Pearlmutter, Silvija Krajter Ostoic and Ivana Zivojinovic .

Natalie Gulsrud had proposed the structure of the book chapter before the meeting and the subgroup agreed this. During the meeting Alan Simson and David Pearlmutter prepared the abstract/summary that was requested for the book chapter. The title of the book chapter is *Challenges to Governing Urban Green Infrastructure in Europe* and it will draw on a paper that critically addresses the *European Green Capital Award* from the governance perspective. It will also contain case studies of multi-level governance that were collected during the COST Action. (Lead author Natalie Gulsrud.)

### **Sub-group 4: Economic valuation (leader: Nerys Jones)**

Present: Nerys Jones, Naomi Zurcher, Maria-Beatrice Andreucci, Johan Östberg.

Since fewer than half the members of the sub-group were present, it was agreed that the focus of the meeting should primarily be on one proposed paper and on the group's contribution to the COST book.

Progress on the group's first paper on the comparative valuation of the benefits of the green infrastructure of London Victoria BID (lead author Maria-Beatrice Andreucci) was briefly noted. Although a start had been made, progress had been slower than expected and was further complicated by the delay in the release of *i-*

*Tree v6* (now expected in September 2015). The first interim draft of the paper is now scheduled for late July.

The sub-group's second paper – a review of green infrastructure valuation methodologies – is aimed at policy makers and practitioners (lead author Johan Östberg). Johan Östberg and Naomi Zurcher reported on progress to date, which involved selecting a framework for analysis and initial consideration of around 25 valuation models. A first draft of the paper is scheduled for the end of July.

The sub-group undertook to produce a chapter for the COST Action book. The working title is *Economic Benefits of European Green Infrastructure Projects – a case study overview* (lead author Maria-Beatrice Andreucci). Examples of suitable case studies will be invited from other members of the COST Action, with particular reference to the work of the partnership sub-group. The aim is to select a long list of examples drawn from a wide geographical range and which illustrate a range of benefit categories. A timetable for the chapter production will be drawn up by the end of July, with the target of meeting the editor's deadline of November 2015.