The role of the new campus for urban ecosystem services on local and city-wide scales

Assoc. Professor Erik Andersson
E-mail: erik.andersson@su.se
Design for ecosystem services

• Why the explicit focus on green?
• Where do ecosystem services come from?
• How can we make sure they are available where they are needed?
Ecosystem services

• We still depend on ecosystems for our survival and wellbeing
• Food, clean air, clean water, soil processes, photosynthesis, climate control …
• From a campus?
  – Recreation
  – Pedagogical
  – Health
  – Aesthetics
  – Local climate and environment
Getting to grips with an inclusive concept
Design for ecosystem services

• Why the explicit focus on green?
• Where do ecosystem services come from?
• How can we make sure they are available where they are needed?

• We need to understand basic ecology
• ...and we need to understand the social systems set up around it
The most obvious
More basics
Finally – a system
Apples – the comprehensive summary

• A tree of the right variety
• Site conditions (water, light, temperature...)
• Other apple trees
  – Where?
  – What variety?
• At least one pollinator
  – Additional habitat resources
  – Interconnected populations
  – Diversity to face down disturbance
• ...and all of this within a limited geographical space
Albano

How to make the pieces add up

• Individual design components
• The sum is more or less than the parts...
Basic premises and logic

• Build on what is there
  – Complex systems are ... complex
  – Local and regional ecology
  – The landscape remembers

• Tailor to need
  – Which services?
  – Nature and character of the services
  – Campus and beyond
Elements

• Performative buildings
• Active grounds
Users

• Active transaction as often as not
• Create value by adding layers facilitation and precaution
• Values, preferences and needs differ
• Albano focus on but is not limited to university students and staff
• Where is the service, where is the beneficiary?
Scales

- Element, campus, region
- Interactions within and across scales
- Smaller scales are nested in larger, an one single scale is never enough
- Does Albano make sense? One new piece in the Stockholm puzzle
Connections are key

- Movement, flow, exchange, heterogeneity
- Why would anyone go from A to B?
- Green arteries
- Differential opportunities
- Guiding logic
Similarity or complementarity

• The city – or any landscape – can be understood as a set of resources
• What are the regional strengths that can be built on?
  – Cultural ‘gardens and parks’ landscape
  – Oak woodlands
  – Wetlands and blue infrastructure
• What is missing?
  – Need for management and maintenance
• Active grounds revisited
A pathway towards sustainability

- Contextualise and anchor knowledge in experience
- Behavioural change may start small
- A mental shift – the power of the ‘good’ example
  - Thought provoking
  - Easy to understand
  - Broadly meaningful
Implications and conclusions

• Sustainability needs to be integrated/addressed at all scales
• Elements need to be used strategically
• Indirect benefits are at least as important as the direct
• Experimental knowledge personal meanings are key
  – Live in, of and with nature
Kiitos, thanks