

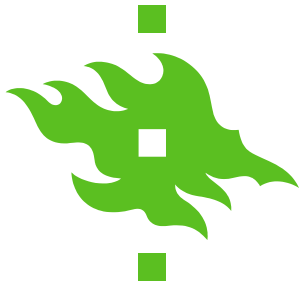
Delivery of Cultural Ecosystem Services in urban forests of different landscape features and land use contexts

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Urban forests

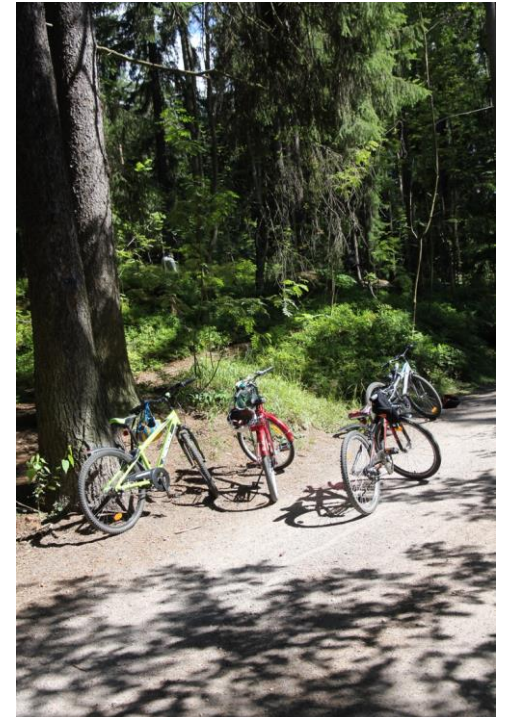
- Substantial Green Infrastructure
- Extensively managed
- Cultural Ecosystem Services Providers

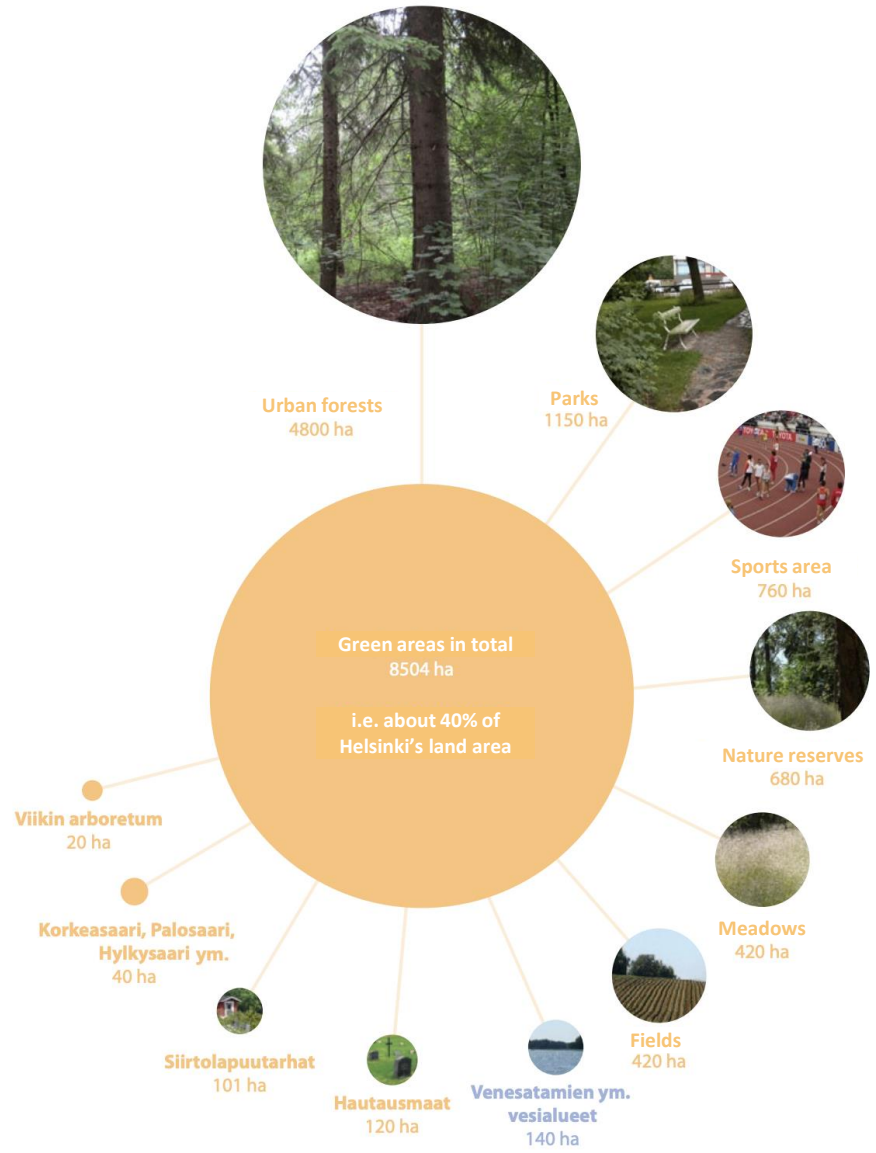


Walking, dog walking, horse....

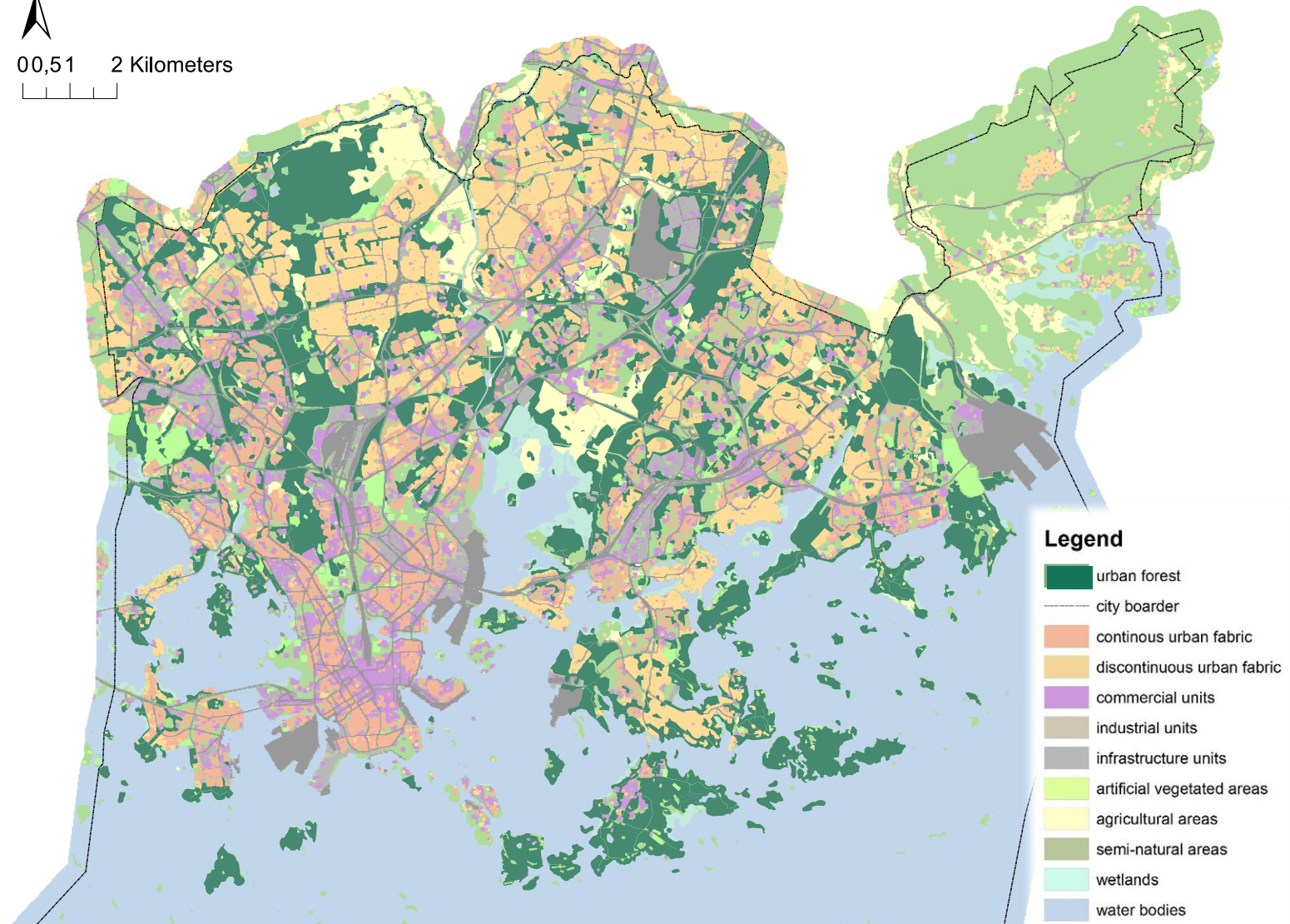


Berry picking

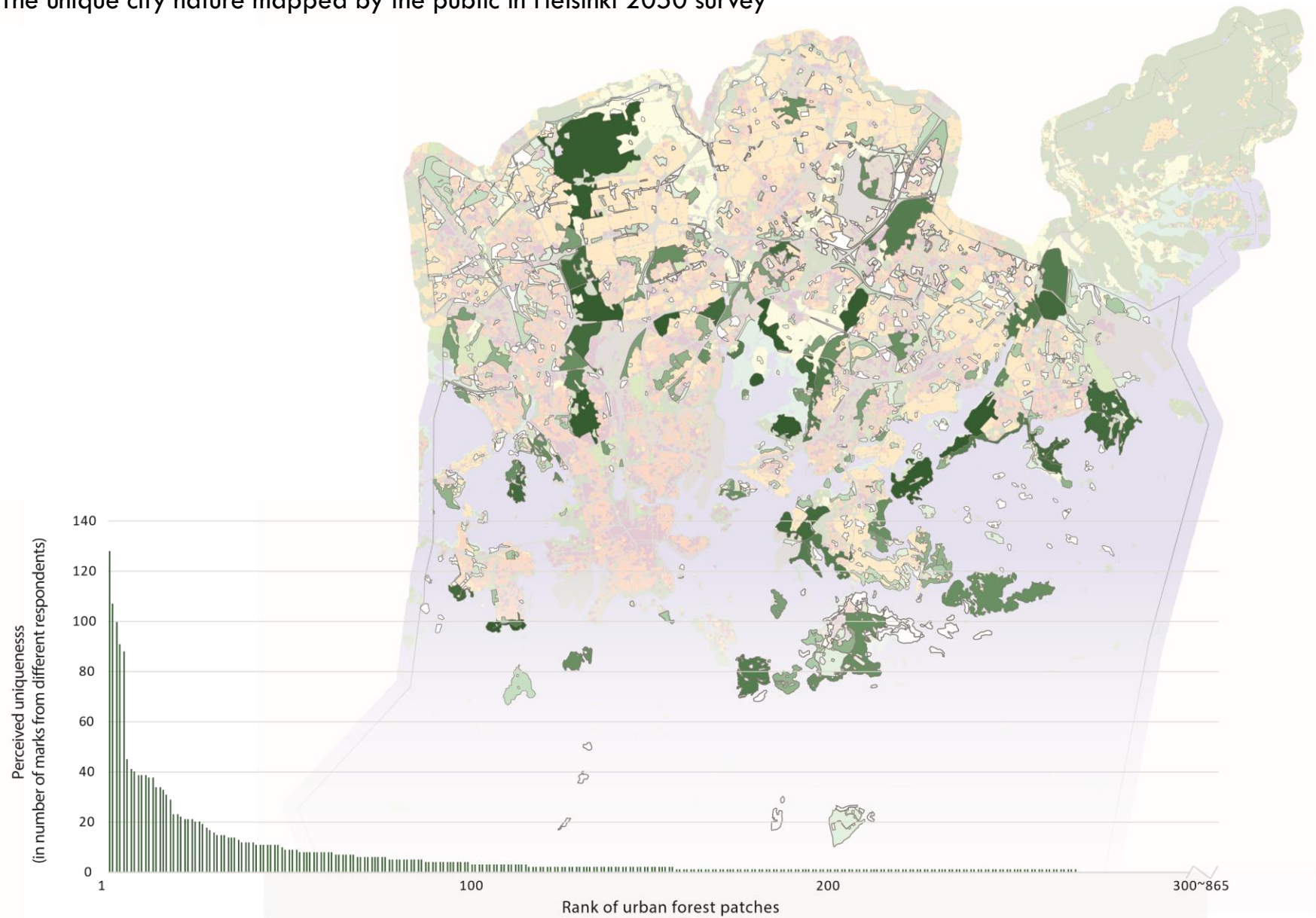




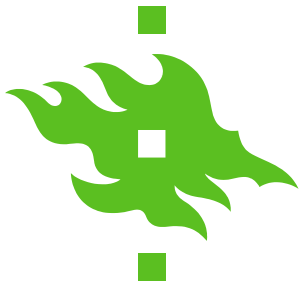
Urban forest patches identified in UGI map



The unique city nature mapped by the public in Helsinki 2050 survey

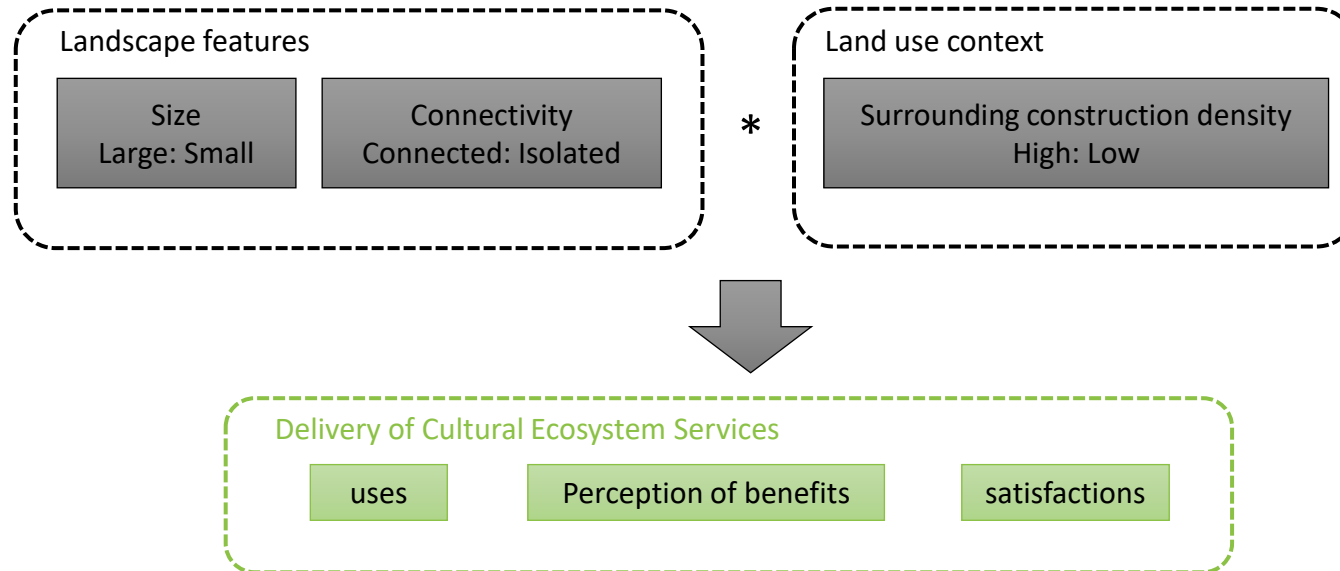


Wang, Y., Kotze, D. J., Vierikko, K., & Niemelä, J. (2019). What makes urban greenspace unique – Relationships between citizens' perceptions on unique urban nature, biodiversity and environmental factors. *Urban Forestry & Urban Greening*, 42, 1–9

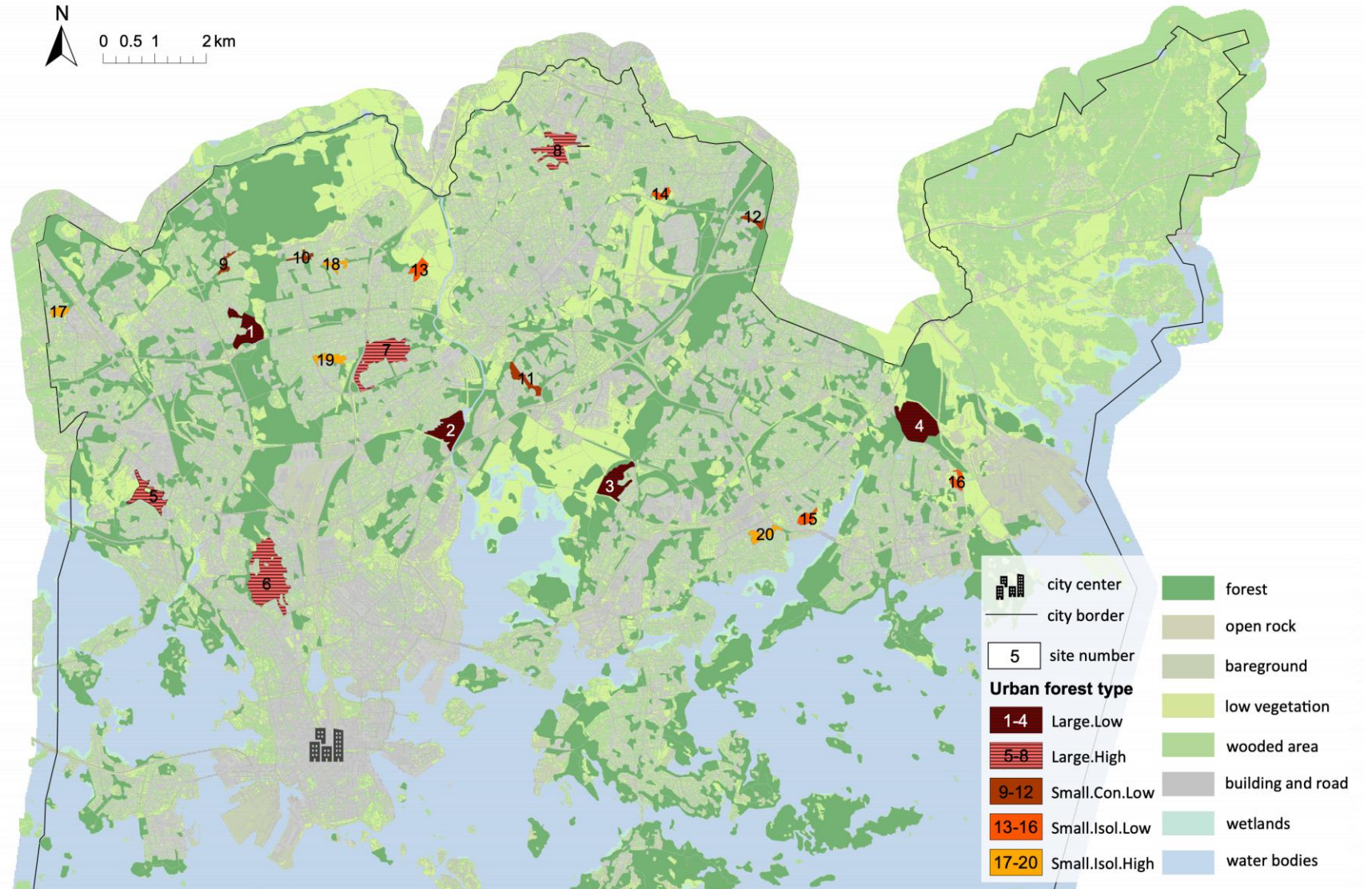


Research question:

How landscape features and land use context facilitate or hinder the delivery of CES in urban forests?



Map of study sites



On-site Survey 2016

4 replications × 5 types :

- Large.Low:
- Large.High
- Small.Con.Low
- Small.Isol.Low
- Small.Isol.High

Face to face questionnaire

CES uses

Perceptions CES benefits

Satisfaction

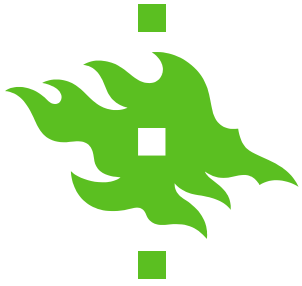
Observation

Visitation rates

Estimated activities

Estimated age class

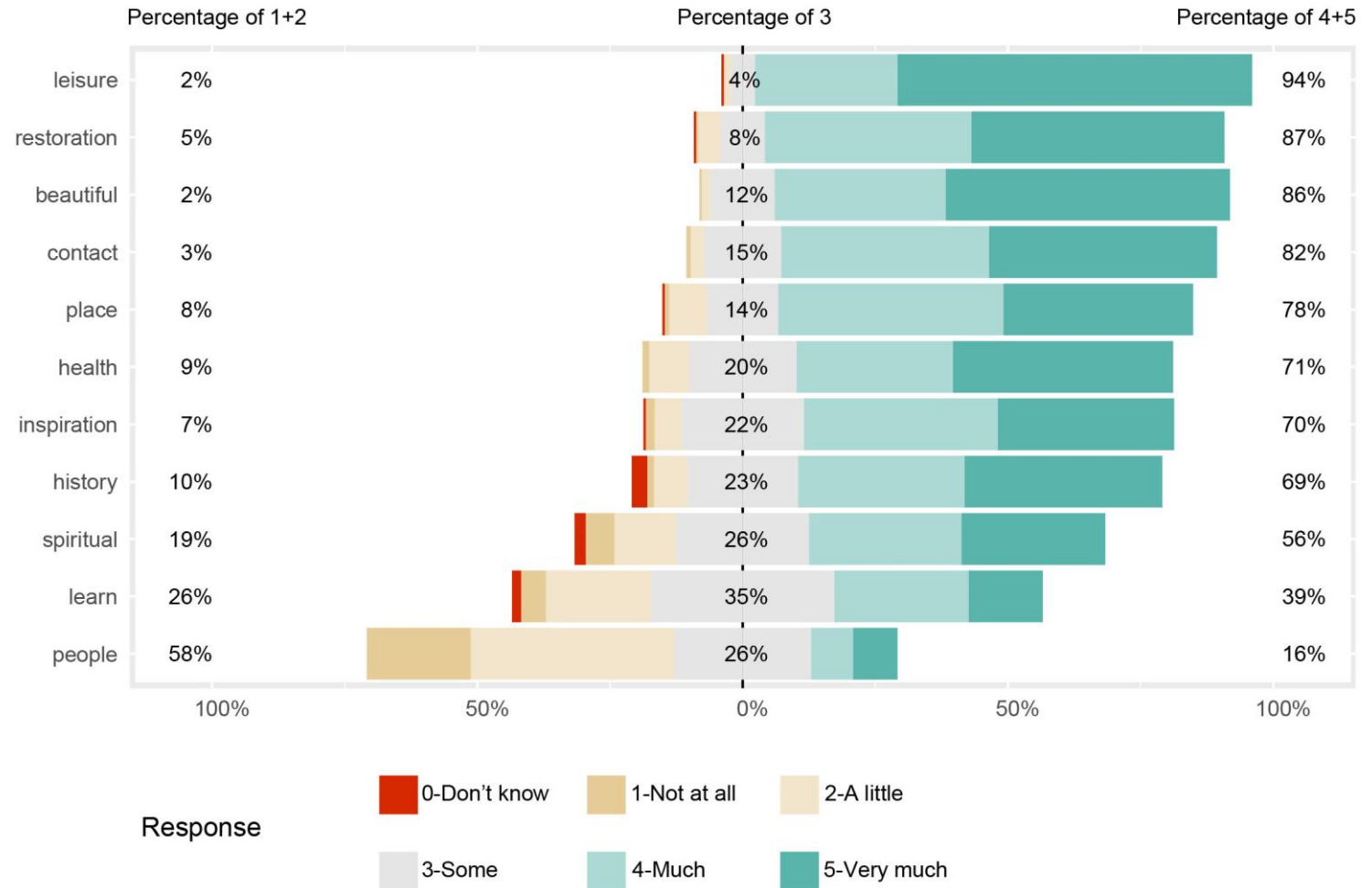
Cultural Ecosystem Services		Descriptions in questionnaires
Category (MEA)	Subcategory	
recreation	experience of nature	I contact with nature
	physical change	I improve my physical health
	psychological restoration	I feel restored from daily routine
	general relaxation	I enjoy leisure time
sense of place		I feel sense of place
aesthetics		I get beautiful scenery
Inspiration		I get inspired from nature
education		I learn from nature
spiritual		I have spiritual contact with nature
cultural heritage		I appreciate the history of the landscape
social relations		I enjoy meeting people

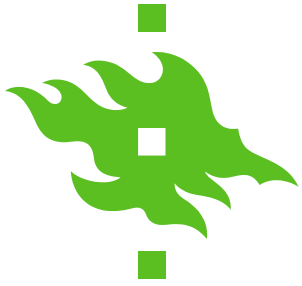


Unique CES of urban forest

- Restoration and contact nature on daily basis
- Lack of social benefit/activity, while physical activity dominant

Summary of the experience ratings from all questionnaire respondents



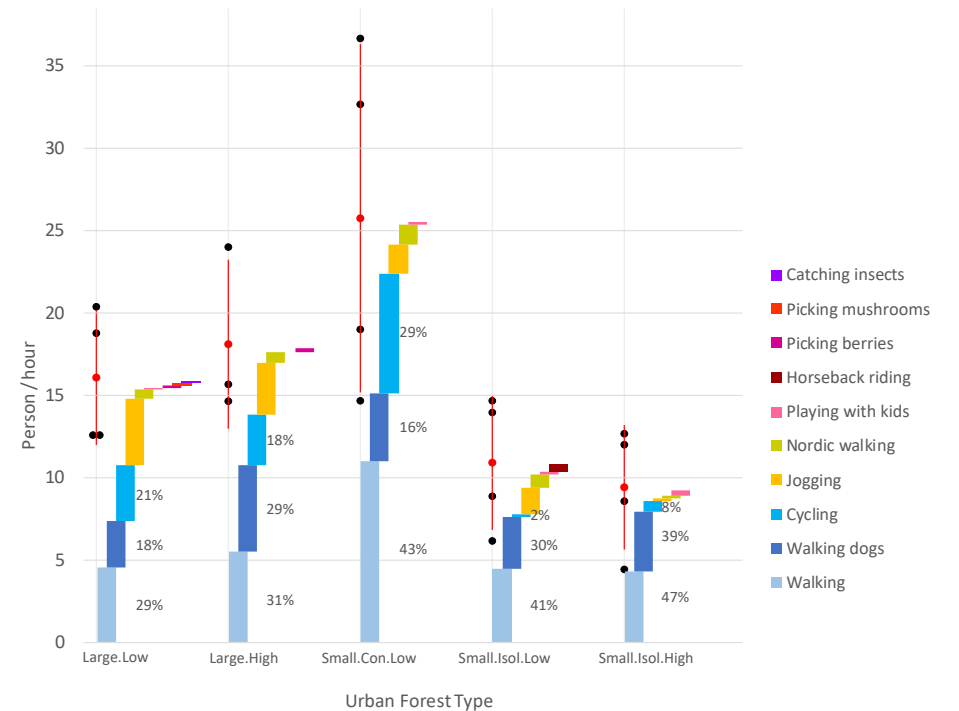
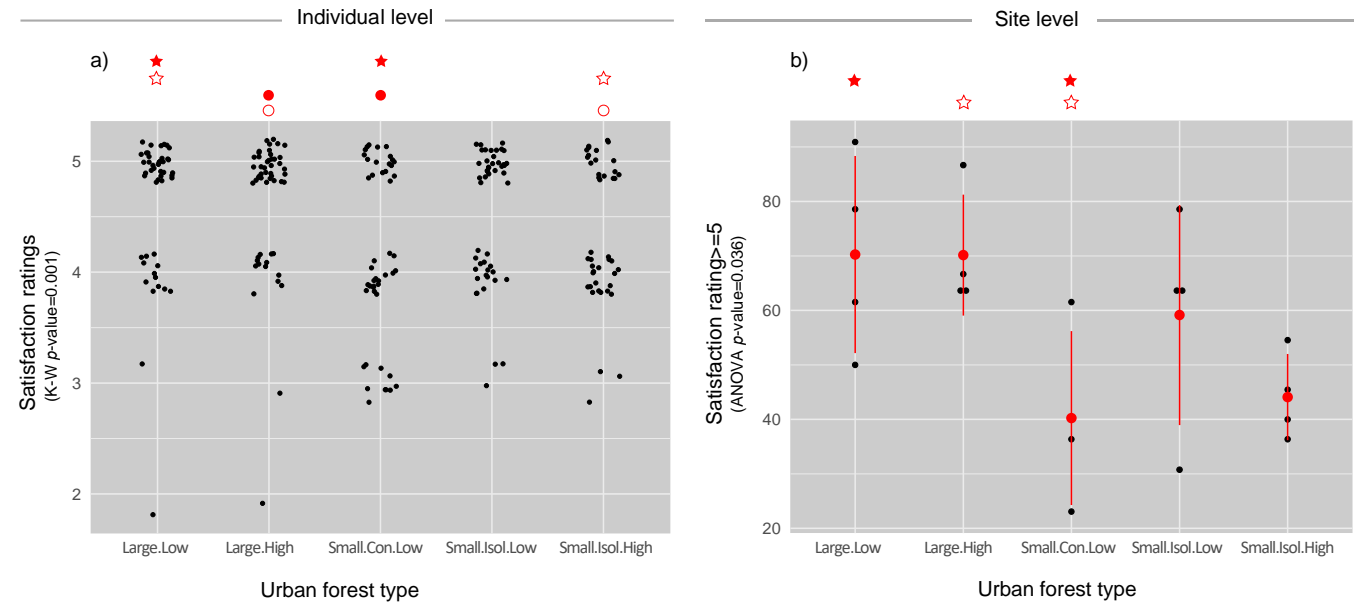


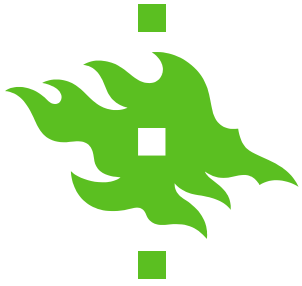
Effects of landscape features and land use context

Size: highly satisfied CES through longer and more intense physical uses

Connectivity: encourage use but benefits not appreciated

Surroundings construction density: well perceived benefit

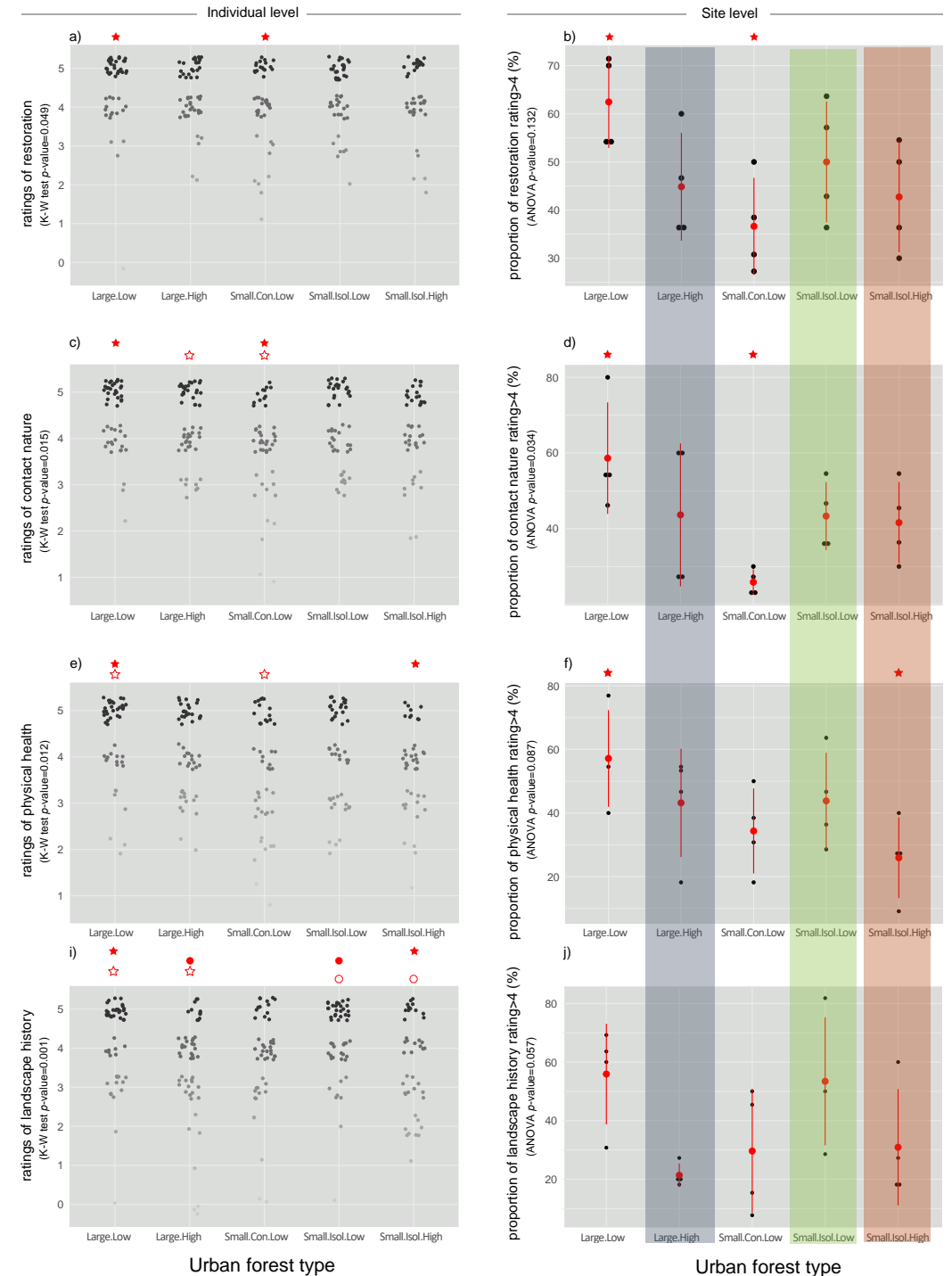




Interaction of landscape features and land use context

Low density surroundings may compensate shortcomings of small forest

In high density area, maintain as large forest as possible





Thanks for listening and questioning