

# Appreciation of cultural ecosystem services in the urban-rural fringe

Ting Zhou (周婷), Eveline van Leeuwen, Eric Koomen

Department of Spatial Economics VU University, Amsterdam

### Context

The attractiveness of cities depends, amongst others, on its cultural ecosystem services: the nonmaterial benefits people obtain from ecosystems through spiritual enrichment, cognitive development, reflection, recreation, and aesthetic experiences (MEA, 2005). A better understanding of the general appreciation of these services can help managing them and may allow city planners to provide a more attractive city for their residents.

This study focusses on the valuation of cultural ecosystem services in the urban-rural fringe. It tries to unravel the appreciation residents have for the various services that are offered by the different landscape elements in and around the city. Specific attention will be paid to differences in valuation along the urban-rural gradient and their relation with proximity (distance from home location) and scarcity (relative abundance) of preferred landscape elements.

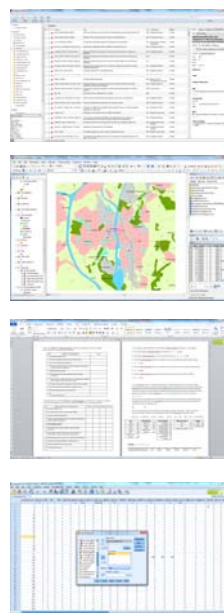
### Research questions

- What is the quantitative relation between the inhabitants' appreciation of cultural ES and their residential distance?
- What are the factors that contribute to the residents' appreciation?
- How does the inhabitants' appreciation of cultural ES change along an urban-rural gradient?



### Method

- Literature review on types and evaluation of cultural ES;
- Spatial analysis to define landscape elements associated with cultural ES;
- Map-centered questionnaires to obtain local residents' most preferred and disliked landscape elements;
- Regression analysis to explain landscape valuation from landscape attributors, residents' characteristics and their home location.



### Study area

Initial analyses have been performed for the Amstelland region, south of Amsterdam. Currently field work is ongoing in the Maastricht region.

Landscape elements in Maastricht and surroundings



### Questionnaire



### References

- R. K. Shrestha, A. F. Seidl (2002). Value of recreational fishing in the Brazilian Pantanal: a travel cost analysis using count data models. *Ecological Economics*, 42(9(1-2)): 289-299.
- J. Kozak, C. Lant (2010). The geography of ecosystem service value: The case of the Des Plaines and Cache River wetlands. *Applied Geography*, 31(1): 303-311.
- L. Hein, K. van Koppen (2006). Spatial scales, stakeholders and the valuation of ecosystem services. *Ecological Economics*, 57(2): 209-228.
- D. B. van Berkel, P. H. Verburg (2014). Spatial quantification and valuation of cultural ecosystem services in an agricultural landscape. *Ecological Indicators*, 37: 163-174.
- K. Gee, B. Burkhard (2010). Cultural ecosystem services in the context of offshore wind farming: A case study from the west coast of Schleswig-Holstein. *Ecological Complexity*, 7(3): 349-358.

### Contact

- @ ting.zhou@vu.nl
- ☎ +31205989499
- ☎ +31205986004
- 🏠 De Boelelaan 1105, 1081 HV  
Amsterdam, the Netherlands