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<u>Title:</u> The Choice of Forest Location for Recreation: a Revealed Preference Analysis using Spatial Data Complement festivity

## **Abstract**

In this paper, we conduct a discrete choice analysis of preferences for forest characteristics and nearby nature features using revealed preference data. Data are organized from spatial coordinate systems of visited forest and departure locations. Respondents are the Danish forest visitors and the spatial data covers the whole forests in Denmark. Simple random sampling technique is used to determine alternative forest sites to be included in the choice set. Based on a conditional logit regression, the forest attributes are found to significantly influence the choice of forest location. Distance is one of the main factors affecting recreational value negatively. Forest area, forest density, and availability of other nature features are additional factors that can influence recreational attractiveness of a forest. State owned forests are more valuable than private forests with respect to recreation. Along with these findings, we empirically showed the possibility of consistent parameter estimates from taking sample of alternatives (in case of larger choice sets). These findings can provide invaluable additional information for forest management and afforestation plans that would target to accomplish sustainable use of multifunctional forests.

## Keywords

Discrete choices, forest recreation, revealed preference, spatial data, sampling of alternatives.