Abstract template for the conference "A century of national forest inventories – informing past, present and future decisions"

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On page two, you are asked to fill in your abstract in the format and font size indicated. Please remember to include authors affiliation information in the footer section of page two. The length of the abstract may not be more than one page including references.

Abstract title:		**More than forest – monitoring amenity values in the Danish NFI**
Take-home message:		*It is often recognized that forests represent large amenity values for society in relation to e.g. recreation. Unlike most forest inventories the Danish NFI include monitoring of several recreation variables. Surprising results arise from this monitoring that may serve as inspiration for others.*
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General topic, see website: (please double click on the check box and activate the relevant one)	☐	Improving future NFIs by learning from the past
	☒	NFIs today and in the future
	☐	Cutting edge and futuristic inventory techniques and technologies
Preferred presentation form:	☒	Oral presentation
	☐	Poster
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More than forest
– monitoring amenity values in the Danish NFI

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Introduction: Despite their importance, most national forest inventories to a large extent ignore specific recreational values when monitoring the status and development of forests. Compared to the other Nordic countries, the Danish forests are small and fragmented. Even though taking up less than 15 % of the land area, forests play a major role for the population with approx. 70 mill. annual visits by the adult population. As one of the relative few, the Danish national forest inventory includes monitoring of several variables linked to recreational activities in the forest. This study demonstrates how recreational activities may be monitored and discusses their status in a European perspective with reference to the outcome of the EU Horizon 2020 project – DIABOLO.

Materials and methods: The Danish NFI is a continuous sample-based inventory with partial re-placement of sample plots based on a 2 x 2 km grid covering the Danish land surface (Nord-Larsen and Johannsen, 2016). Access to the forests as well as recreational activity is registered as part of the NFI measurement procedures. The recreational data recorded include: recreational access (forest road, formal paths, informal paths), recreational infrastructure (formal campsites, evidence of camping, evidence of camp fire), activity (hunting facilities and other facilities) and abuse (littering, vandalism).

Results: Danish forests are easily accessible along forest roads, formal and informal paths. A total of 70 % of the sample clusters were accessible by forest roads, formal or informal paths. In private forests access along informal paths is illegal, but a total of 43 % of the clusters were accessible by forests roads and 45 % were accessible by formal paths, including clusters accessible by both forest roads and formal paths.

The recreational activity is visible in the forest. On 46 % of the clusters, the NFI teams found evidence of camping, camp fires, hunting facilities or other facilities (forest playgrounds, picnic tables etc.). The most common facilities were related to hunting. Shooting platforms and facilities for feeding were found on 39 % of the clusters. The downside to the widespread activity is that litter was found on 20 % of the clusters.

Conclusion: The results show the importance of forests for recreation in Denmark and may serve as a baseline for monitoring the development in both activity as well as the downside of activity such as littering or vandalism. The monitoring of recreational activity with the NFI may serve as inspiration for others.

References:

Nord-Larsen and Johannsen, 2016. Danish National Forest Inventory: Design and calculations. Department of Geosciences and Natural Resource Management, University of Copenhagen

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