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

Dear author. This is a two-page template that in the first page will ask for information on presenter name, topic, and preferred presentation form.

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:		Linking NFI to the sustainable urban development agenda – a new perspective for NFI reporting
Take-home message:		We present a harmonized methodology for NFI's reporting on the forest located in and at the fringe of urban areas.
		In Europe, 'urban forest' is much more than a niche for the forestry sector and the sustainable urban development agenda.
		Expanding the scope of NFIs to report on urban forest resources is in line with the evolution of forest inventories as multipurpose resource surveys.
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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
	X	NFIs today and in the future
		Cutting edge and futuristic inventory techniques and technologies
Preferred presentation form:	X	Oral presentation
		Poster
Abstracts will be reviewed by members of our scientific committee and you will be given information on decisions in due time after the submission deadline has passed.		

## Linking NFI to the sustainable urban development agenda – a new perspective for NFI reporting

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**Introduction**: Europe's forests are becoming increasingly urban. Over time, forest patches have been absorbed by urban development. Forests, located within and at the fringe of urban areas, now constitute significant shares of national forest resources and are the most frequent type of green (in terms of green land cover) in many European cities. Today, the 'urban forest' is widely regarded as the backbone of urban green infrastructure having a key role in urban ecosystem functioning and the quality of life and health of urban populations. However, data to quantify and characterize forest located in and around European urban areas have so far been either lacking or fragmentary. As a consequence, urban forests are under-represented in policy and practice. In this regard, an expansion of NFIs to report on urban forest resources can be leveraged to fill key knowledge gaps.

Materials and methods: In a joint taskforce, NFI and urban forestry affiliates from Denmark, Finland, Germany, Lithuania, Norway, Sweden, Switzerland and the UK, developed a harmonized methodology for NFI reporting on urban forest resources. The method combines the spatial, wall-to-wall, population data on the Degree of Urbanization (DEGURBA) with NFI plot data. Thereby, we can provide NFI data on forests located within urban clusters with a minimum population of 5.000 and their fringes (<2 km) where everyday forest recreation is concentrated.

Results: The pilot study revealed that 'urban forests' constitute much more than a "niche". In densely populated countries (> 200 capita/km2; CH, DE, UK) about one fifth of the total forest area is located within or less than 2 km from urban clusters. In sparsely populated countries (< 50 capita/km2) Finland, Lithuania, Norway and Sweden the share is markedly lower, but estimated to potentially host up to 180 times more forest visits per area unit compared to rural forests. We were able to show that NFI data can be used for providing information on urban areas. Compared to current remote sensing based information sources, NFIs provide a wide range of information allowing for quantification of the multiple ecosystem services provided by urban forest.

Conclusion: The eight countries included in the study more or less represent the span among EU member countries with respect to country size, forest cover and population density. We therefore conclude that the combination of DEGURBA and NFI data can provide a harmonised methodology, applicable in all European countries. As such the method has potential for NFIs to be leveraged to fill key knowledge gaps regarding the quantity and quality of urban forests at the national and European level, and as such qualify future policy and decision making across the forest and urban divine.

**Reference:** Gusrud, N., Nielsen, A.B., Bastrup-Brik, A., et al., 2018. Urban Forests in a European Perspective: what can National Forest Inventory tell us? Workshop for Practitioners and Researchers held on March 15, Brussels – Summary of workshop results. Department of Geosciences and Natural Resource Management, University of Copenhagen, Frederiksberg.

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