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:		Evaluation of the new sampling strategy for the Swedish national forest inventory
Take-home message:		
Presenter name:		Anton Grafström
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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
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Evaluation of the new sampling strategy for the Swedish national forest inventory

Xin Zhao, Jonas Fridman, Anton Grafström

Introduction: In 2018 a new sampling strategy was launched for the temporary part of the Swedish national forest inventory. The new sampling design incorporate auxiliary variables from a nationwide forest attribute map. The sample was selected to match population distributions of the auxiliary variables as well as possible. This was achieved by a double sampling approach, where auxiliary variables were extracted for a large first phase sample. The second selection was done by the local pivotal method and produces an even thinning of the first phase sample. Thus, we make sure that the selected second phase sample becomes much more representative of the population than what is possible by the use of traditional designs. The full five-year sample was selected using the local pivotal method. The five-year sample was then split into five one-year samples using a hierarchical version of the local pivotal method, ensuring that each one-year sample becomes representative. We will present an evaluation of this new strategy based both on the outcome for the year 2018 and a simulation of potential outcome over the five years.

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