

EVALUATION OF THE NEW SAMPLING STRATEGY FOR THE SWEDISH NATIONAL FOREST INVENTORY

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In 2018 a new sampling strategy was launched for the temporary clusters of the Swedish national forest inventory. The new sampling strategy incorporates auxiliary variables from a nationwide forest attribute map in the sampling design. The sample is selected to match population distributions of the auxiliary variables as well as possible. This is achieved by a double sampling approach, where auxiliary variables are extracted from a large first phase sample. The second selection is done by using local pivotal method (LPM) 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 using traditional designs. The full five-year sample was selected using the new strategy. The five-year sample was then split into five one-year samples using a hierarchical version of the LPM, ensuring that each one-year sample becomes also representative of the population. In this article we present an evaluation of the new strategy based both on the inventory outcome of the year 2018 and a simulation of potential outcome over the five years.

References

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