BOOK OF ABSTRACTS

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Poster Exhibition Monday

Forest information for bioeconomy outlooks – a joint session of the European National Forest Inventory

KG II - HS 2121 (Uni Freiburg)

IUFRO17-212 **Evolution of the information on fuels in the National Forest Inventories in the Iberian Peninsula**

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Abstract: Fire behaviour is strongly influenced by surface, ladder and crown fuels. Crown fires typically consume nearly all the fine fuels in a forest canopy, when wind and a sloping topography are take into account.
National Forest Inventory (NFI) data can be a helpful tool in fuel modelling. In fact, fuel models for forest types can be defined as a combination of overstorey species dominance and stand structure using data from forest inventories. Fuel variables, in particular the ones that measure vertical structure are extremely important to predict fire behaviour. To reduce the probability of crown fire, forest planners should consider how canopy base height, canopy bulk density, and continuity of tree canopies affect the initiation and propagation of crown fire. Yet, the relevant information on these subjects is still scarce and scattered.
Current fire behaviour models require information on the several structure variables that can retrieved from NFI. However, the inclusion of these measurements is relatively recent. In this way, this study aims to compare the developments in Spain and Portugal using the available information of the NFIs since the first inventories in the two countries. The analysis took into account the evolution of the integration of this type of information, the reasons behind these trends, and discuss future developments.

vertical structure; fuel; vegetation