

# DOES CLOSE-TO-NATURE MANAGEMENT HAVE A FUTURE IN REGIONS WITH HIGHLY FRAGMENTED OWNERSHIP?

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## ABSTRACT

There is an urging political and societal demand for close-to-nature forest management in publicly as well as privately owned forests. Especially in densely populated and sparsely afforested regions, where forests as well as the forest ownership are often highly fragmented due to urban development. This fragmentation causes structural difficulties to implement close-to-nature management. The northern part of Belgium (Flanders) was chosen as a case study: private forest owners own more than 70% of the forest area but more than 70% of the owners have less than 10 ha of forest. In absolute figures more than 70 000 owners manage less than 90 000 ha of forests. In addition, forests are also spatially fragmented.

This study formulated as hypotheses that highly fragmented forest ownership makes the introduction of close-to-nature management more difficult due to the unresponsive attitude of the owners of small forests. A survey, based on the Theory of Planned Behaviour, was carried out to understand attitudes, intentions and the factors that determine the perception of private owners towards close-to-nature management. Four hundred private owners were questioned about the use of indigenous tree species and the maintenance of a shrub layer.

The actual application of the two close-to-nature-management practices that were questioned in the survey was very low, although varying slightly for the different forest types (poplar-, conifer-, deciduous-, mixed forest, etc.). Owners from all forest types, except for poplar showed a slightly positive intention to use indigenous tree species in the future. However, the owners have no intentions to maintenance a shrub layer in the next ten years. Nevertheless, owners with forest properties larger than 15 ha had a significantly more positive attitude than owners with smaller properties. For both small and large owners the instrumental attitude and past behaviour were important factors. Furthermore, for the large owners also the social norm was influencing the intention, and for the smaller owners the affective attitude seemed a significant determinant. Consequently, the introduction of close-to-nature management practices is expected to be difficult in highly fragmented regions, and motivating instruments will differ between small and large owners.

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