

PRODUCTIVITY OF THE SUPPLY SYSTEM BASED ON WHOLE-TREE BUNDLING

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Aim of the study

The absence of the empirical time study models and parameters for whole-tree bundle harvesting, bundle forwarding and truck transportation has been problem when comparing alternative supply systems for integrated pulpwood and energy wood procurement. The present study was aimed at constructing time consumption models and parameters for these operations.

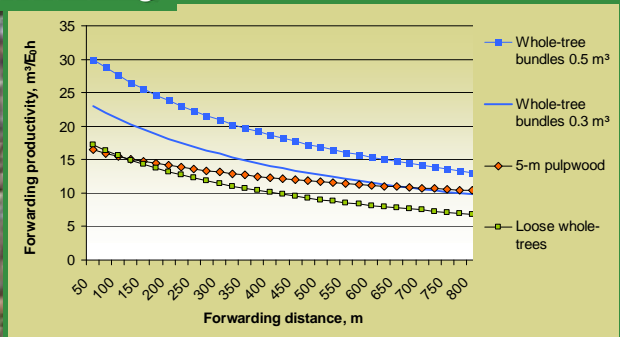
The present study was a part of a R&D project coordinated by Metsäteho Oy. It was funded by the National Technology Agency (Tekes), the Finnish forest industries, and Finnish Forest Research Institute. The time studies of the whole-tree bundling system were carried out in 2008–2009 in Central Finland.

Bundling

The time studies on bundle harvesting with the second prototype of the "Fixteri" bundle harvester will start in the autumn, and thus results are not yet available.



Forwarding



Transportation

The loading time, including the setup and auxiliary time, was 40 minutes (E_0h) when the truck load size was 90 whole-tree bundles. The unloading time, when the bundles were unloaded directly to railway wagons, was 24 minutes (E_0h) per load.



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