

Roof Frames in Brussels Building Heritage: a Multi-disciplinary Project as a Basis for Dendrochronological Research

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In October 2013 a two-year multidisciplinary research project started on roof frames in building heritage, funded by the Brussels-Capital Region. This project combines archaeological, historical and dendrochronological studies in a global approach to these wooden structures. The dendrochronological material involves 25 new sites (buildings), to which are added around 70 sites from previous studies. Two Belgian dendrochronology laboratories collaborate on the project (University of Liège and Royal Institute for Cultural Heritage, Brussels). This important corpus of material from a limited geographic area covering only 161 km² offers numerous research perspectives, which are very specific to the densely built Brussels-Capital Region.

The wood used in these buildings indeed reflects an eventful urban history marked by destructions that occurred among others in the historical centre of the city in the 17th century. Through the study of wood we approach topics such as the difficulties of lumber supply to the city. As such we observed a vast diversity of wood species used for roofs (oak, elm, alder, poplar, ash, fruit trees, conifer...), as well as knotty, fast growing young trees.

These wood characteristics make our work for dating quite difficult, inciting us to increase the number of samples per structure and to work on short ring series. From the first studies from the 1990s until today, around 70 chronologies have been dated for the region, covering the period 1146 – 1845 AD. These can now be used as a valuable reference table for further studies in Brussels, supplementing the other regional and site reference databases.

Beyond dating, this dendrochronological material is also used in a dendro-archeological context, for example for research on the provenance of the trees and the conditions in which they grew. These results could be combined with information found in archives allowing to move forward on the question of wood supply.

This paper will present a short overview of the project and some dendrochronological points specific to the Brussels area, with a selection of examples in different contexts that illustrate situations enriched by this multidisciplinary research.

Reference

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