

Czájlik, P., Gálhidy, L., Kenderes, K., Mihók, B., Ódor, P., Standovár, T., Tímár, G. & Kelemen, K. (2003): Report on Site-based Permanent Plot, Second-phase and New Mapping Studies: Alsóhegy Forest Reserve. Nat-Man Project Working Report 53., p. 17.

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Short reference: Czájlik et al. (2003)

First author: Czájlik P.

Year: 2003

Abstract:
SUMMARY

Changes of tree stand structure and composition were studied in the Alsóhegy Forest Reserve. It is an interesting place for studying forest stand dynamics since: it is a relatively large reserve; it is the best example of mixed deciduous forests (dominated by beech, oaks and hornbeam); it was managed as coppice with standards (mittelwald), and then left for free development for more than 50 years. Typical karstic geomorphology created spatially variable site conditions. Early regeneration dynamics is impeded in the whole reserve by the high density of browsing game species.

Two permanent transects were established in 1994 and rerecorded in 2002. Stem number decreased in both transects (to 93% and 82%) mainly because mortality of trees in the <10 cm and 10-20 cm dbh classes was significant. Only one or two old trees with larger diameter (>40 cm) died within this short period. In both transects hornbeam had the highest mortality followed by beech. The density of other tree species remained almost the same. Recruitment of new trees into the >1.3 m layer was negligible (density of new trees = 1%) showing the strong effects of browsing.

We planned to study gap dynamics using aerial photographs taken at different times. Unfortunately the older photographs we had access to were of bad

quality, so we could only describe contemporary gap patterns using a photograph taken in 2000. It was built in a GIS database so different gap statistics and relationships with topographic variables (elevation, slope, aspect) could be studied. We recognized 405 gaps with an average gap size of 57.92 m². The proportion of gap area in the reserve was 2.33%. These data show that the trees in this reserve are not old enough to have high natural (age-dependent) mortality, resulting in low proportion of gap area (compared with reserves in more natural status, e.g. Kékes). Average gap size was rather small, almost half of that found in the Kékes Forest Reserve.

élőhely: gyertyános-tölgyesek, bükkösök

erdődinamika, lékdinamika, szukcesszió

erdőszerkezet: faállomány

holtfa

módszertan: felmérés, monitorozás

Notes:

Nat-Man, Fagus, bükk, forest development phase, erdőfejlődési fázis

Location: The report is available at www.flec.kvl.dk/natman

Típus: kutatási jelentés, jegyzőkönyv, digitális adat

Strict forest reserves: [Alsó-hegy Erdőrezervátum](#) Katalógusba vette:

Horváth

Ferenc és Deme Csaba

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