Czájlik, P., Kenderes, K. & Standovár, T. (2003): Report on Site-based Permanent plot, Secondphase and New Mapping Studies: Őserdö Forest Reserve. Nat-Man Project Working Report 52., p. 11.

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Abstract: SUMMARY

Őserdő Forest Reserve is a good example of beech-dominated forests that have been left for free development in the past 60 years, but was managed before. The age of dominant canopy trees is around 150-250 years. It lies on the karstic plateau of the Bükk Mts., so the effects of karst phenomena on stand dynamics can also be studied. The southern part of the reserve is more plateau like with some dolinas, but with much thicker soil than in the northern part, where on the steeper south-facing slope rendzina type soil is shallow, providing a much warmer and drier site. The whole reserve is extremely strongly affected by browsing game species, so regeneration is much less successful than it should be.

A map of forest developmental phases was prepared, though this forest can not be regarded as a reference for true natural dynamics (c.f. Kékes Forest Reserve). The map shows, that in the northern part of the reserve patch types with mountain ash as an important component are characteristic, regeneration of beech is almost completely lacking. In most part of the reserve the old stand opened up (being in aging, collapsing or regeneration phase) still showing the "synchronizing" effect of former management.

Gap dynamics was studied for a 20-year period using aerial photographs taken in 1980 and 2000. They were built in a GIS database so different gap statistics and relationships with topographic variables (elevation, slope, aspect) could be studied. The number of gaps remained almost the same (57 in 1980, 56 in 2000). Average gap size increased slightly from 140 m² in 1980 to 165 m² in 2000, but the proportion of gap area in the reserve remained almost the same (3.04% in 1980, 3.53% in 2000). Most gaps were in the size range of 0.01–0.1 ha. The distribution of gaps among patches of different topographic conditions (elevation, slope, aspect) changed slightly, resulting in larger gap areas e.g., at lower elevations, on less steep slopes in 2000 than in 1980. This might reflect the fact that on the southern part of the reserve, where site conditions are better, old beech trees could grow larger, so gap creation because of the death of these huge beech trees become more frequent.

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: Őserdő Erdőrezervátum Katalógusba vette:

Horváth

Ferenc és Deme Csaba Katalógusbavétel időpontja: 2009-01-03