

Raised peatbog Bór na Czerwone (Podhale, South Poland) – development, degradation, renaturalisation

Adam Łajczak

Faculty of Earth Sciences, University of Silesia
Będzińska 60, 41-200 Sosnowiec, Poland, e-mail: alajczak@o2.pl

Abstract

The peatbog Bór na Czerwone is one of many raised peatbogs in the Orawsko-Nowotarska Basin. The peatbog developed during the Holocene on the Vistulian high terrace in place conditioned by favourable ground topography, geology, water and climatic relations. It contains two domes surrounded by a marshy coniferous forest, the limit zone of a peatbog and broad post-peat areas. This object may be recognised as a raised peatbog asymmetrically developed below the local topographic elevation on the inclined surface, and also as a transitional form between topogenic and dripping peatbogs. The peatbog has been degraded since the 17th century mainly due to peat exploitation and draining measures, which first started on a large scale in the 19th century. Its original area, reproduced from an analysis of maps and ground features, has shown a decrease by 50% to present times. The largest changes in the peatbog morphology occurred within its main dome. The second, smaller dome of the peatbog was degraded mainly due to construction of deep drainage ditches. The preserved fragment of the larger dome was placed under protection in 1956. Since that time the peatbog studied has undergone a process of renaturalisation, which is visible in the land relief changes and water changes within the dome. The comparison of the moistening of the peatbog with other objects in the Orawsko-Nowotarska Basin, permits one to report the good condition of the area studied. Almost the whole area of the main dome of the peatbog display a healthy moistening intensity in the acrotelm layer. The enlargement of the reserve in 2003 and the proposed extension of the whole area, to include the neighbouring marshy coniferous forests complex, as well as the suggested technical measures, should make for a faster rate of renaturalisation of the whole currently preserved dome.

Key words

Bór na Czerwone peatbog, Orawsko-Nowotarska Basin, Polish Carpathians, peat exploitation, raised peatbog, raised peatbog renaturalisation.