

## **IMPACT OF PEAT EXCAVATION ON THE GORBACZ NATURE RESERVE**

**Ilnicki P.**

The southern edge of the large "Michałow-Imzar" peatland (ca 60 km<sup>2</sup>), located in the Podlaskie province, is formed by raised peat. Horticultural peat has been excavated in that area since 1966. In the area of 48.3 ha the excavation ceased in 1998, while in 16.53 ha it was started in 2004. The Gorbacz peatland nature reserve, established in 1966, is located to the north-east of the excavation area. It covers the area of 113.73 ha. The whole peatland was incorporated in 2004 in the "Puszcza Knyszyńska" special bird protection area Natura 2000, extending over approx. 132 thousand hectares. Peat excavation is connected with deep internal drainage of the peatland and complete destruction of the existing plant communities. It causes a potential threat to the natural and seminatural plant communities and for the overgrowing lake, found in the reserve. In the years 1981-2004 numerous studies were conducted in the Imzar bog, the aim of which was to determine the effect of peat excavation on water conditions in the nature reserve. This study is a synthesis of the results of all the studies conducted so far. It makes it possible to determine the actual effect of anthropopressure on the natural environment in the reserve. It covers the stratigraphy of the peat deposit as well as climatic, hydrographic, hydrological and natural conditions in the Imzar bog (ca 450 ha). The results present data collected during several decades of observations. This makes it possible to draw reliable conclusions. Problems of this type are also found in other excavated bogs in Poland and in other European countries.