

The impact of forest management on the flora and vegetation of old oak-stands (An example from The Spała Forests, central Poland)

Marcin Kiedrzyński

Department of Geobotany and Plant Ecology, University of Łódź
Banacha 12/16, 90-237 Łódź, Poland, e-mail: kiedmar@biol.uni.lodz.pl

Abstract

In the Spała Forests stand with above 140 years old oaks occupies 226 ha, it is about 1.5 % of forests surface. Almost 40% of this stand is protected within nature reserves. For this study, the best-preserved oak-stands localised in the timber forests (constituting next 40 %) were selected. In the given area were found: 287 species of vascular plants, 33 species of mosses and 2 species of liverworts. The population size of 50 endangered and protected plants was estimated. The identification of degenerate forms of plant communities indicates the impact of forest management on the flora. The most important factor responsible for degeneration is the planting of the Scotch pine. At present it is manifested by the domination of coniferous forests species and the rapid growth of expansive species in the herb-layer. The planting of European beech is also unfavourable for the oak-forests flora. The role of pinetization should decline (cutting of old pines, regeneration) in the future, but the planting of beech is going to have a dominate influence on the degeneration of old oak forests.

Key words

Old oak-stand, floristic diversity, forests management, central Poland