

Abstract

This thesis focuses on the changes of vegetation of the wet meadows in Slavkovský Les during past decade. It uses data on vegetation gained from 100 permanent plots. By the analysis of the species composition and diversity it aims to elucidate the changes of the wet meadows over the last ten years. It aims to define, which are declining and which are becoming more common. Applied management should have a great impact on the observed vegetation changes so its effect is studied in the thesis as well. The knowledge of the suitable management should lead to conservation of the local biodiversity. The abiotic environmental factors are important as well as they can influence the species composition. These factors were studied by the application of Ellenberg indicator values on the species present in the study. These changes were compared in time and in a combination of time with a management type. Thus, we should be able to say how the environment has changed in the past decade and whether the type of management has any effect on the changes. Furthermore, the thesis explores whether changes in species composition over time may be explained by species traits. The results indicate that the species diversity and composition have indeed changed during the past decade. Apparently, the higher amount of nutrients in a soil has an impact on the species composition and increased abundance of generalist species. The most endangered are the species that were rare already in the past and there is a need to find a suitable management to ensure their protection. Simultaneously, there is a higher amount of species that are tall. This leads to a higher competition for light and competitive exclusion of short species. Results of this study provide information on the development of current plant communities and highlight certain risks linked to the observed changes. It would be appropriate to continue with the research of wet meadows in Slavkovský Les, compare the data on a longer time scale and find a suitable management for these rare biotopes.