Abstract

Common juniper (*Juniperus communis*), as a species of predominantly open habitats, used to be part of semi-natural grassland communities, such a pastures. In the area of Moravian Wallachia (eastern part of the Czech Republic) this type of grassland is known as juniper pasture, however as in the whole of Europe, it is a type of habitat that is disappearing rapidly from the landscape, among other reasons due to the absence of juveniles in the population. A total of 20 potentially preserved juniper pastures were identified within nine cadastral areas in the Moravian Wallachia (Beskydy Protected Landscape Area) and visited during the vegetation period. The total number of *J. communis* individuals was recorded, including their dendrometric (crown height and radius) and descriptive characteristics (sex, vitality, developmental stage, sociability, form). Characteristics of vegetation cover and type of site management were also recorded to define the main factors influencing the vitality and proportion of juvenile individuals in the population of *J. communis*. Field research was supplemented by analyses of orthophotos and topographical data processed in a GIS environment. In total 2,896 juniper were recorded at 20 locations, while the population of *J. communis* in the area of interest can be characterized by the predominance of individuals in a stable stage of development, with a high proportion of individuals in the form of polycormons and also with a balanced sex ratio. Majority of juniper grow in a group, and over the observed period of 22 years, there was an increase in the dense stands of *J. communis* by 60%. Populations of *J. communis* show a high rate of individuals with impaired vitality (46%), while the main environmental parameter that affecting the vitality of *J. communis* individuals could not be distinguished. It was also not possible to prove a statistically significant effect of grazing on the proportion of juvenile individuals in the *J. communis* population. Steep slopes (> 15°) with higher proportion of microhabitats suitable for germination of *J. communis* seeds, which are extensively grazed by sheep, seem to be important for the preservation of rejuvenating populations of *J. communis* within the area of interest. Finally, yet importantly measures were proposed to optimize the management of juniper pastures in the area of interest.

Key words: *Juniperus communis*, pastures, vitality, rejuvenation, conservation management, Moravian Wallachia