

Abstract

The thesis aims for relationship between military-caused disturbance intensity and species richness, conservation value and composition of arthropods communities in the Brdy Mts. In the Brdy abandoned military area (MTA), a highly heterogeneous habitat mosaic developed by the long-term influence of military disturbances on two shooting areas of Jordán and Tok. The habitats range from strongly disturbed sites with sparse vegetation, through heterogeneous growths of *Erica* and *Vaccinium* in moderately disturbed sites, to sparse woodlands in the least disturbed sites. Based on the shooting areas history reconstruction, 24 study plots of 4 categories of different disturbance intensity were selected in both shooting areas together. Standardized sampling of seven groups of arthropods was performed in summer 2017 by pitfall traps, yellow pan traps, and light traps. More intensive disturbances positively influenced species richness of Aculeates and conservation value of spiders and beetles, but negatively affected species richness of moths. Simultaneously, the intensity of disturbances affected community composition of spiders, moths, beetles, Aculeates and Orthopteroids. Endangered species mostly affiliated to the more intensively disturbed plots. This results should be helpful in understanding of influence of disturbances on arthropod species and in protecting of species resided in open habitats.

Key words: disturbance, fire, frequency, intensity, invertebrates, arthropods, insect, military training area, MTA, heathland, Brdy