

Atlas rozšíření suchozemských plžů v CHKO Bílé Karpaty

Distribution atlas of terrestrial gastropods in the White Carpathians Protected Landscape Area

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Abstract

The mollusc fauna of the White Carpathians Protected Landscape Area (PLA) has been neglected for a long time. This situation changed in 1996 by including the PLA into the worldwide network of UNESCO Biosphere Reserves. Many surveys have since been carried out and the knowledge about this area has been improved. This atlas provides a comprehensive overview of all land snail species recorded in the PLA.

A total of 431 sites were sampled throughout the PLA, covering a variety of habitat types. Altogether, 104 snail species were found, which represents nearly two-thirds of the whole land snail fauna of the Czech Republic. This is related to a broad habitat diversity in the PLA with many preserved areas of high conservation value. Many of the recorded species are listed in the Czech Red list of threatened invertebrates, including *Bulgarica cana*, *Vitrea transsylvanica* and *Daudebardia brevipes* (Endangered) and *Vertigo moulinsiana* (Critically Endangered). Moreover, *V. moulinsiana* and *V. angustior* are covered by the European Natura 2000 network.

Most of the White Carpathian snail fauna is formed by forest species inhabiting in high numbers many preserved forest sites. In contrast, the large area of meadows is inhabited by a few common species, probably because these mesic meadows occur on deep, originally forest soils, which have lost calcium carbonate due to leaching. Nevertheless, on a fine scale, the Carpathian bedrock flysch is one of the most variable types of bedrock. Landslides, which are typical of it, have formed the White Carpathian meadows into a very diverse landscape. Small skeletal patches with exposed calcareous bedrock enrich the malacofauna of meadows by hosting typical xerothermic and steppe species which usually inhabit sites on limestone substrates. Another situation in which carbonate substrates can reach the surface, are tufa-forming spring fens, which can support exceptionally species-rich communities of many rare marshland and open-country species.

Key words: land snails, White Carpathian Mts., distribution maps, list of sites, shell photographs.