



Conference Abstract

Conservation of the populations of *Centaurea immanuelis-loewii* (Asteraceae) in NATURA 2000 in Bulgaria

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Abstract

Centaurea immanuelis-loewii Degen is a perennial herbaceous plant species of the Asteraceae family, a Balkan endemic protected by the Bulgarian Biodiversity Act. The species is found in few places in northern Greece and southwestern Bulgaria and has been identified as important for conservation by the European Community. For this reason, a significant part of its populations is included in the European ecological network NATURA 2000. In Bulgaria the species is found in 3 floristic regions – Znepolski region (Konyavska Mt., Golo Bardo Mt.), Struma Valley (Boboshevski Gorge, Ruen Mt., Sandanski, Kresna, Oshtava villages) and Pirin (Vlahi village), at 100–900 m. This study aims to determine the current status of the populations of the species in Bulgaria covered by NATURA 2000. The main threats to the species have also been identified. *Centaurea immanuelis-loewii* inhabits stony and scree sites and enters into the composition of the open xerothermic grass communities. It has been established in five Sites of Community Importance (SCIs) in Bulgaria. The population of SCI ‘Ostritsa’ is the largest in number. It covers an area of about 35 ha and numbers several thousand individuals. In the SCI ‘Konyavska Planina’ the occupied area is also relatively large - about 33 ha, but only about 300 individuals are found there. In the other three sites the populations are very small: 0.0066 ha in the SCI ‘Skrino’, 3.37 ha in the SCI ‘Kresna-Ilindentsi’ and 2.09 ha in the SCI ‘Middle Pirin-Alibotush’, with numbers ranging between 100–600 individuals. The main threats are: the decrease of the occupied area due to the construction of a highway (Golo Bardo Mt.), the

extraction of inert materials (Konyavska Mt.), erosion, the low reproductive and migratory potential of the species, the specific habitat to which it is attached. For the conservation of the species and its habitats the following measures are proposed: targeted scientific research for the accumulation of data on the species' reproductive capacity and its effective support, *in situ* and *ex situ* conservation and restoration of the populations, restoration and maintenance measures for the habitat of the species, and achievement of greater effectiveness of legal measures.

Keywords

Centaurea, endemic and threatened plants, *in situ* and *ex situ* conservation activities, NATURA 2000

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