Rescuing 'invisible mammals': Conservation efforts for the blind mole rat species of Hungary

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Abstract

Subterranean blind mole rats of Central Europe were once considered pests, but now face extinction. Recent studies have revealed that three distinct endemic species of blind mole rats belonging to the *Nannospalax* genus inhabit the Pannonian Basin. The Hungarian (*N. hungaricus*), Vojvodina (*N. montanosyrmiensis*) and Srem blind mole rats (*N. syrmiensis*) are all highly endangered species. Information is currently available on the occurrence of the Vojvodina and Hungarian blind mole rats in Hungary. The blind mole rats in this region have long been persecuted, and much of their habitat has been lost, fragmented or degraded. The Pannonian endemic species of the group are threatened with extinction as they only exist in a few small and isolated populations. We have compiled all available data from the last 20 years relating to the distribution, threats, and conservation actions of these species. Based on this information, we have conducted national and global risk assessments of the species. Recent findings also suggest that blind mole rats play a key role in grassland ecosystems. Their digging creates mounds of bare soil surfaces that are available for plant colonisation and maintain soil structure. They also provide burrows for other animals. Practical conservation interventions, such as establishing new populations, offer hope in the fight to save these species. The conservation efforts made so far, the solutions implemented, and the lessons learned may contribute to the successful conservation management of other species or similarly sensitive situations.

Keywords

blind mole rat, *Nannospalax*, Hungary, grassland, Pannonian Biogeographic Region