Residents support the conservation of the Hungarian (*Nannospalax hungaricus*) and Vojvodina (*Nannospalax montanosyrmiensis*) blind mole rats in Hungary

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Abstract

To provide a good basis for species action plans, we surveyed the knowledge, attitudes, and opinions of 1,005 residents and professionals regarding two endemic blind mole rat species in Hungary: the Hungarian (*Nannospalax hungaricus*) and Vojvodina (*Nannospalax montanosyrmiensis*) blind mole rats. As the first social survey about these endangered subterranean species, we aimed to assess the support level of prospective conservation measures, identify knowledge gaps, and reveal potential human-wildlife conflicts.

Results indicated mostly neutral (55%) or positive (41%) attitudes. Interestingly, respondents attributed significantly more negative opinions to others, suggesting that perceived conflicts — particularly among agricultural specialists regarding imagined damages — are largely unfounded. This was supported by 94% of participants reporting that these species cause at most insignificant damage. Furthermore, 94% of respondents endorsed species protection measures, and 87% - mainly those who liked blind mole rats and had appropriate knowledge about them and would like to know more information - supported maintaining blind mole rat habitats within settlements, even prioritising them over infrastructural developments serving their own comfort. Notably, 74% welcomed the establishment of new populations by conservationists. While a prevalent misconception exists that these species damage gardens, despite this, 98% of residents are opposed to lethal control methods. Moreover, we succeeded in localising those settlements where there is a higher chance of lethal control, so where we need to prioritise social inclusion, targeted education, and form a more positive attitude toward the species.

Overall, we identified wide public support for the long-term conservation of blind mole rats, though targeted educational campaigns remain necessary for specific demographic strata. These findings provide an excellent basis for the protection of these potential flagship species and their habitats as they are keystone subterranean and umbrella species, which are connected to the uniquely species-rich Pannonian grasslands.

Keywords

Hungarian blind mole rat, Vojvodina blind mole rat, questionnaire, species conservation, endemic species, Pannonian grasslands