

Abstract

Coprophagous beetles play a crucial ecological role in processing dung in grazing ecosystems, yet many species are endangered, and their population dynamics are poorly understood. In the Radotín Valley Nature Reserve, where extensive grazing is used to maintain rocky steppes, research was conducted on coprophagous beetles from the Scarabaeidae and Geotrupidae families in steppe, ecotone, and forest habitats. The aim of this thesis was to map the diversity of coprophagous beetles using pitfall traps during 2022 and 2023 seasons, determine the species composition and population dynamics of species that were found, and estimate the population size of *Sisyphus schaefferi*. In the Radotín Valley, 25 species of coprophagous beetles were found, including rare and endangered species such as *Onthophagus medius*, *Onthophagus lemur*, *Eoniticellus fulvus*, and *Sisyphus schaefferi*. Some of these species were rediscovered after more than sixty years. The study also analyzed the habitat preferences of individual species, revealing that specialists inhabit both steppe and forest biotopes, while generalists predominantly occupy the ecotone. The faunistic findings provide valuable data for nature conservation, and the work also represents a pioneering effort in studying the population dynamics of coprophagous beetles in the Bohemian Karst.

Key words: Coprophagous beetles, Geotrupidae, Scarabaeidae, population dynamics, population