

## ROZŠÍRENIE BYSTRUŠKOVITÝCH (COLEOPTERA, CARABIDAE) A ŠTRUKTÚRA ICH SPOLOČENSTIEV POZDĹŽ VERTIKÁLNEHO GRADIENTU V DOLINE NEFCERKA (VYSOKÉ TATRY)

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### ABSTRACT

Vician V. **Distribution and structure of ground beetle assemblages (Coleoptera, Carabidae) along an altitudinal gradient in Nefcerka Valley in the High Tatra Mountains, Slovakia**

Ground beetles (Coleoptera, Carabidae) of Nefcerka valley were studied within 3 sampling sites along an elevational gradient. A total of 499 specimens were identified to 11 species. The most abundant species was *Pterostichus morio carpathicus* (176 ind., 35,5 %) followed by *Trechus pulchellus* (90 ind., 18 %) and *Pterostichus anthracinus* (86 ind., 17,2 %).

Carabid assemblages within forest site were the poorest with respect to both the number of species and abundance. More diverse and abundant fauna of carabids was found on sites situated on sparse dwarf pine stands and alpine meadows

A correlation between abundance and altitude was observed by *Trechus pulchellus* and *Nebria tatraca*, respectively. *Trechus pulchellus* was most abundant at the lowest site and its abundance continuously decreased towards the highest, contrary to *Nebria tatraca* with abundance negatively correlated to altitude.

**Key words:** Coleoptera, Carabidae, the High Tatra Mts, altitudinal gradient, species diversity