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EROSION VULNERABILITY OF THE SURFACE – A LIMIT ON SUSTAINABLE LANDSCAPE DEVELOPMENT

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ABSTRACT

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Threats to the surface by natural disasters (such as snow avalanches, debris flows, landslides, floods etc.) are supplemented by the author with soil erosion due to surface runoff. In the temperate belt, this process is a permanent one and it results in slow but permanent soil losses. The disaster is an important factor affecting carrying capacity of the landscape and can limit it significantly.

Above all, the author introduces an analysis of the erosive threat of a forest soil surface in Slovakia (Tab. 1) on the basis of the rate of potential soil losses, and suggests criteria for the evaluation of potential soil losses based on substrate, soil depth, and gravel content (Tab. 2).

Key words: sustainability, carrying capacity, natural hazards, soil erosion, limits on development