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**ASSESSMENT OF LANDSCAPE CHANGES: THEORETICAL STARTING POINTS FOR STUDY AND THE RESEARCH REALITY**

The definition of identification criteria, evaluation and prediction of landscape changes follows out from key parameters of the individual landscape structures (natural – primary, functional = economic – secondary, human = social – tertiary, potentially spiritual – quaternary = genius loci) of the characterizing invariants. Periodical recurrence of processes maintains the structures of the landscape within its spatial, functional and temporal aspects but it concurrently leads to a gradual transformation of one landscape into another. The landscape form is therefore subject to alterations as well. In the CR the study of landscape changes is confronted with the problem of a limited field surveying as opposed to laboratory data processing concerning the land use in different periods (statistical data, old topographical maps, remote sensing data). Long-term measurements are missing namely in the primary landscape structure. A complex study of landscape is thus feasible only within the scope of geography disposing of data and knowledge concerning all landscape structures together with their aspects and changes,. It would be optimal if a complex geographical station were established to enable extended measurements and observations of the landscape with emphasis on changes in the spatial aspect.

**Vladimír FALŤAN, Martin BÁNOVSKÝ**

**CHANGES IN LAND COVER THE AREA OF VYŠNÉ HÁGY – STARÝ SMOKOVEC, IMPACTED BY THE WIND CALAMITY IN NOVEMBER 2004 (SLOVAKIA)**

The calamity for forests situated in of the Tatras National Park caused by whirlwind on 19 November 2004 is distinctive due to the dimension of damage. The characteristic of changes the in the spatial structure of the land cover in a selected area in the Tatras National Park in the locality of Vyšné Hágy – Starý Smokovec, are examined in this paper. The research is based on the analysis of landscape structure before and after the wind calamity in November 2004, employing the methodological procedures of CORINE Land Cover. The data and analysis are important for an integrated assessment of the research area and for landscape planning.

**Jan MUNZAR, Stanislav ONDRÁČEK, Libor ELLEDER, Krzysztof SAWICKI**  
**DISASTROUS FLOODS IN CENTRAL EUROPE AT THE END OF JULY 1897 AND THE LESSONS LEARNT**

The year 2007 marked the 10th anniversary of the natural disaster of July 1997, which affected a number of countries in Central Europe. In the Czech Republic, it was the "flood of the century". One certain analogy was an extreme event that was recorded exactly one hundred years previously, in the summer of 1897. While in the summer of 1997, the summary multi-day records of total precipitation in certain localities were broken, the one-day amount of 345 mm measured at the Nová Louka/Neuwiese station in the Jizerské hory Mts. (780 m a.s.l.) on 29 July, 1897, was not surpassed. Up to the present, then, it is therefore a Czech (and most likely also, at least a Central European) record. The extreme precipitation in the summer of 1897 resulted in unusual flooding that affected a considerable part of Central Europe. In the territory of the current Czech Republic, the floods occurred mainly in the Upper Labe (Elbe) River Basin. The disastrous floods caused immense material losses and took the toll of at least 167 human lives. At the same time, however, they became an impetus for a range of flood-control measures.

**Miroslav VYSOUDIL**

**SURFACE ATMOSPHERE LAYER TEMPERATURE (CASE STUDY OF THE NATURE PARK BYSTRŮVICE RIVER VALLEY, THE NÍZKÝ JESENÍK HIGHLAND, CZECH REPUBLIC)**

The temperature regime in the surface atmosphere layer in the Bystřice River Valley Natural Park, in the central part of Nížký Jeseník Highlads, Czech Republic, is examined in this paper. Time series from 7 functional automatic meteorological stations were analyzed from May to August, 2006. In an effort to capture active surface effects in the greatest possible detail, air temperatures at a height of 1 m at intervals of 30´ were measured. Only those time series from radiation days represented by days with anti-cyclonic weather situations were analysed. The study covered analysis of the average monthly temperatures, extreme daily and monthly temperatures, and temperature amplitudes with respect to altitude, local specifics of station elevations and the predominant character of the active surface in

their surroundings. At selected stations, attention was focused on the rate and intensity of surface atmosphere layer warming in July, at. 6:00-14:00 CEST. During the same time period, temperature inversions were analyzed with respect of their intensity and duration. Results of the analysis demonstrated considerable temporal and spatial differences in the temperature regime at the level of topoclimate. It was concluded that absolute altitude, great elevation differences between the stations and variations in their aspect, along with local geomorphological conditions, represent key factors in the temperature regime dissimilarities or in the existence of pronounced differences in topoclimates in the Nature Park territory.

#### REVIEW

Marian HALÁS - TOUŠEK, V., KUNC, J., VYSTOUPIL, J. ET AL. (2008): EKONOMICKÁ A SOCIÁLNÍ GEOGRAFIE. PLZEŇ: ALEŠ ČENĚK, 2008, 411 PP. ISBN 978-80-7380-114-4