Anotacijos Abstracts

Galvydytė D., Kavoliutė F. Middle Nemunas Delta soils. *Geography. Scientific Journal.* 2002. Vol. 38 (1).

The article presents various natural and human factors influencing the formation of soils in the Nemunas Delta. Also, natural soils without signs of ploughing typical only of the maritime region are described.

References 9. Figs. 2. Lithuanian, summary in English.

Keywords: soils, natural soils, Nemunas delta.

Štaras A. Water balance models employing possibilities for river runoff analysis. *Geography. Scientific Journal.* 2002. Vol. 38(1).

The article deals with the possibilities for river runoff analysis and shows river basin water balance modelling. The three main parts of water balance model are presented. Ways of precise estimation of inputs, outputs and storage in river catchments are described.

References 7. Figs. 2. Lithuanian, summary in English.

Keywords: water balance, modelling, river runoff

Rimkus E., Bukantis A., Kazakevičius S. UV irradiation patterns in the warm period of 2001 in Kaunas and Vilnius. *Geography. Scientific Journal.* 2002. Vol. 38(1).

Fluctuations of UV irradiance in Kaunas and Vilnius were analysed in this work. Measurements from May to August 2001 have been used for this study. The influence of different factors (cloudiness, ozone, aerosols, sun-angle) on UV irradiation were evaluated.

References 11. Figs. 5. Table 1. Lithuanian, summary in English.

Keywords: UV irradiance, cloud effects, ozone layer

Stankūnavičius G., Bartkevičienė G. Extreme conditions of atmospheric circulation in the North Atlan-

tic: The centers of action. Geography. Scientific Journal. 2002. Vol. 38(1).

The research is based on extreme atmosphere circulation analysis in the North Atlantic–European sector during winter season, using some regional and hemispheric circulation indices. The distribution and intensity of centers of action in the North Atlantic during extreme negative and positive circulation phases are discussed. Also, the main features of sea level pressure fields and time series of circulation indices are presented.

Keywords: NAO, AO, centers of action, sea level pressure

References 41. Figs. 5. Table 3. Lithuanian, summary in English.

Kavoliutė F. Social and natural factors in the formation of the Lower Nemunas Plain landscape. *Geography. Scientific Journal.* 2002. Vol. 38(1).

The article analyses the social and natural factors that caused a different distribution of forest areas in different parts of the Lower Nemunas Plain. This glaciolacustrine plain is one of few Lithuania's nature units belonging to different etnographic regions. Different social conditions determined different of landusing in different part of Lower Nemunas Plain.

References 27. Figs. 2. Lithuanian, summary in English.

Keywords: cultural lanscape, forest, Lower Nemunas plain, glaciolacustrine plain.

Kavaliauskas P., Daugirdas V. The problem of investigation of social tension in the spheres of culture and politics. *Geography. Scientific Journal.* 2002. *Vol.* 38(1).

A methodological basis for studying social tension in culture and politics is proposed. Two clusters of the indices for investigation of the antinomies in these kinds of social space are presented. The problems and main obstacles for studying cultu-

ral and political relations in the social sphere of Lithuania are determined.

References 13. Lithuanian, summary in English. **Keywords:** social tension, culture, politics

Kavaliauskas P., Bražukienė I. The problem of investigation of social tension in the spheres of economics and law. *Geography. Scientific Journal.* 2002. *Vol.* 38(1).

A program for studying social tension is proposed. Two clusters of the indices for investigation of economic and legal antinomies are presented. The problems and main obstacles for economic and legal relation studies of the social sphere of Lithuania are determined.

References 10. Lithuanian, summary in English. **Keywords:** social tension, economic field, legal field

Stanaitis A. Demographic changes in North, Middle and East Europe and the situation of the Baltic States. *Geography. Scientific Journal. Vol.* 38(1)

The article deals with the demographic changes of the last few decades in 17 North, Middle and East European countries. Changes of natural increment, vital statistics and the influence of other demographic rates on natural increment are in the focus of analysis. It is stated that due to difficult economic conditions in the Middle and East European countries the natural increment is on the fall and intensive emigration is taking place. Indispensable measures are needed to improve the present situation.

References 7. Tables 3. Lithuanian, summary in English.

Keywords: demographic changes, natural increment, vital statistics

Dumbliauskienė M. Communicative qualitative analysis of the National Atlas of Slovenia. *Geography. Scientific Journal. 2002. Vol. 38(1)*.

The results of a communicative qualitative analysis of the National Atlas of Slovenia are presented. The main investigations of thematic maps were made using the method of qualimetric analysis, with attention focused on the most important aspects of the atlas: its structure, cartographic expression, and design.

References 18. Figs. 3. Table 1. Lithuanian, summary in English.

Keywords: thematic cartography, national atlas, cartography semiotics, design maps

Kryžanauskas A. Optimization and application of rank defining methods by cartoschemes. *Geography. Scientific Journal.* 2002. Vol. 38(1).

A data individual ranking method using maps where data are divided into intervals is suggested. Some aspects of data division into intervals by mapping are analyzed. Some examples of rank correlation analysis are given.

References 10. Figs 2. Tables 2. Lithuanian, summary in English

Keywords: ranking, carthometrics

Markevičienė J. Sustainability: necessity, ideal morality, or a natural phenomenon? *Geography. Scientific Journal.* 2002. Vol. 38 (1)

A notion of sustainability and sustainable development is actively discussed worldwide. This article is an attempt to apply a different perspective. The author aims at defining the concept of cultural sustainability as a phenomenon of human culture and the notion of sustainable cultural development as an optimal developmental trend for human communities. Another issue analyzed is a possibility to apply this holistic and interdisciplinary approach to urban conservation. Finally, community profiling, based on a set of socio-cultural indicators of sustainable cultural development is proposed as a useful tool for situation analyses in establishing an adequate local policy, which accordingly activates the community in urban preservation; for long-term policies on sustainable cultural development these indicators should be joined with the UN social, economic, and environmental indicators of sustainable development.

References 26. Figs. 4. English, summary in Lithuanian.

Keywords: cultural anthropology, sustainable development, cultural sustainability, heritage, urban conservation

Kaunas Z. Water resources quality management in Lithuania. *Geography. Scientific Journal. Vol. 38(1)*

The objective of the paper is an analysis of the present Lithuanian policy of water management and suggestions for the new strategic directions. Proposals are given concerning planning, improvement of strategy realization and assessment of the results achieved.

References 21. Lithuanian, summary in English. **Keywords:** water resources, management policy.

D. Matuzevičiūtė. 20th century European geospace transformation as an object of geographical knowledge in pupils' education process.

An overview of the European geospace transformation in the 20th century and changes in school geography content in the context of modern Europe conception and relation with the development of pupils' Euro-geographical culture is presented.

References. Figs. 6. Table. 2. In Lithuanian, summary in English

Keywords: space transformation, school geography

Stanislavičiūtė I., Miliauskas V., Soils research. Geography. Scientific Journal. 2002. Vol. 38(1).

The aim of the present article is to point out some inaccuracies and mistakes observed in the monograph. While a review is made on the achievements in soil research at different institutions, the Department of General Geography of the Faculty of Natural Sciences of Vilnius University is not mentioned. Soil research carried out by the soil scientists of the Vokė Branch of the Lithuanian Institute of Agriculture is not objectively described, sometimes erroneus and wrong statements are made without due regard to author's rights. Data of the complex research of soil regimes (seasonal soil-forming processes) carried out in long-term stationary experiments in natural and cultivated ecosystems are not taken into consideration.

References 28. Lithuanian, summary in English. **Keywords**: monograph, soil research, soil regimes