

Carmichael, G.S., Folk, G.E., Schnoor, J.L. (ed.): **Preparing for Global Change: a Midwestern Perspective.** (Progress in Biometeorology. Vol. 9). - SPB Academic Publishing, The Hague 1995. 298 pp. ISBN 90-5103-102-5.

The book contains the proceedings of the 2nd Symposium on Global Change: a Midwestern Perspective, which was held at the University of Iowa on April 7-8, 1994. The presented contributions covered general aspects of global changes such as atmospheric changes, climatology, interactions with biosphere and possibilities of sustainable development, but in each issue the regional specificities and most urgent problems of Iowa were emphasized by almost exclusively US experts. This makes the volume a good cookery book for environmental policy makers and fund rising in environmental sciences, showing how important it is to join serious scientific information with arguments for wide public and authorities including economic ones.

The first part of the book contains 4 papers introducing the main problems of global atmospheric changes. The current knowledge of increased contents of O₃, NO_x, and CO₂ in atmosphere and the elevated proportion of UV-B irradiance is presented with respect to the measuring techniques, analysis of transport models, survey of present data and predictions of atmospheric changes. In the second section of this proceedings (8 contributions) anomalies in Midwestern climate are discussed, particularly the role of variability of precipitation, hydrologic state and temperature. Great importance is attached to the causal analysis of the Great Flood of 1993 in Iowa and to flood prediction and control. The separate section covers the effects of global climate changes on biosphere. This topic is conceived on ecosystem scale and includes the loss of biodiversity in both plant and animal kingdoms, the analysis of chronological and spatial changes of vegetation types and species composition with implication for the future, the application of the theory of biodiversity and biogeography on continuous landscapes. The role of "life style acclimation" of human communities to global climate changes is stressed as prerequisite for sustainable development in the only contribution neglecting the Iowa's aspects which was written by S.P. Adhikary from Nepal. The last paper of this section reviews the impact of climate changes on human health, particularly the adverse effects of increased UV-B radiation and spread of infectious diseases are mentioned. Also the possible way how to mitigate some causes of "antropogenic" diseases such as alternative energy sources and the decreased production of phototoxic chemicals are mentioned. In the last section 3 contributions summarize the basic theory of sustainable development and a progress in putting through these principles on governmental and nongovernmental levels. The concrete goals, suggestions and useful references in economics and consumption, energy efficiency and renewable sources, water quality, chemicals in agriculture and industry are listed according to Earth Charter and Agenda 21 for Iowa.

Experts may find the information concerning their branch of study to be superficial and incomplete. Particularly in the third section all the results dealing with mechanisms of global changes impact on living organism and stress physiology are missing. But the main goal of this book is to present basic information on global changes and environment understandable for the public.

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