

GEOINDICATORS — THE WORKSHOP IN VILNIUS, LITHUANIA, OCTOBER 11–16, 1999

The geoindicator concept was the subject of a recent international workshop held under the sponsorship of IUGS, the Geological Survey of Lithuania (LGT) and the Institute for Earth Science and the Environment (Geological Society of America). Geoindicators are measures of geological processes and phenomena occurring at or near the Earth's surface and subject to changes that are significant for environmental monitoring over periods of 100 years or less. Geoindicators assess both catastrophic events and gradual ones that are evident within a human lifespan. They help to answer the questions: What is happening in the environment? Why is it happening? Why is it significant? What are we doing about it? They can be used for assessing conditions of terrestrial and coastal environments on a wide range of spatial scales from local to global, as well as for establishing baseline conditions and trends from past environments. Geoindicators can help to determine and explain to planners and decision-makers the importance of biophysical changes in urban and non-urban landscapes. They can also assist in environmental impact assessments, in ecosystem monitoring, and in baseline surveys prior to major developments such as mining, land clearing, and construction of reservoirs, roads, canals, and river diversion projects.

The Vilnius workshop was attended by some 40 participants from Belarus, Bulgaria, Canada, Estonia, Finland, Latvia, Lithuania and Poland. It was designed to explain the geoindicator concept and its application to environmental monitoring, and to test its applicability to practical situations in countries of the region. General reviews were presented by A.R. Berger, P.T. Bobrowsky and D. Huntley, representing the IUGS Commission on Geological Sciences for Environmental Planning (COGEOENVIRONMENT), the umbrella under which geoindicators were compiled and published in 1996 (for an annotated checklist see).

One full day of the workshop was devoted to some 20 oral and poster presentations and case studies from the various national countries represented. These included, inter alia, reviews of groundwater as a "universal geoindicator of environmental processes", human-induced geomorphological and landscape changes, soil chemistry, neotectonic hazards etc.

A field excursion to northern Lithuania enabled participants to examine a wide range of features related to active and semi-active karst phenomena. The last day of workshop was devoted for discussion which resulted with very important conclusions and guidelines for future activities.

This issue of Geological Quarterly contains selected papers, presented during the workshop. Organisers of the workshop acknowledge all participants, who took active part in the workshop, supporting organisations for the provided means and Geological Quarterly for the kind proposal to publish workshop papers.

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