

Preface

The 11th Estonian Ecology Conference on Biodiversity and Ecosystems was held in Tartu, Estonia, on 7–8 April 2010. The tradition of ecology conferences in Estonia began in 1978 and was implemented by the Ecology Council of Estonia, a joint body of the Estonian Naturalists' Society (established in 1853) and the Estonian Society for Nature Conservation (1966). During the period since 1978, 17 thematic books of proceedings have been published.

The main objective of the 11th conference was to highlight the most significant trends and problems in present-day ecology, based on the research carried out in Estonia during the last decade. At the eight sessions of the conference, 40 oral presentations (including 6 keynote speeches) were made, and 21 posters by representatives of various Estonian research institutions were presented. The papers and posters were presented in three general sessions:

- Material cycling, energy flows, and biodiversity in aquatic ecosystems; the ecology and environmental problems of the Baltic Sea
- Material cycling, energy flows, and biodiversity in terrestrial ecosystems
- The application of geographical information systems in ecology.

Keynote speeches introduced the main topics of the thematic sessions:

- Martin Zobel: Biodiversity patterns: From local studies to global laws
- Ülo Niinemets & Ülo Mander: Carbon and nitrogen cycling: from global to local
- Georg Martin: Assessment of the eutrophication level of the Baltic Sea
- Urmas Kõljalg: Biodiversity databases
- Tõnu Oja: GIS applications in ecology
- Toomas Frey: Ecological thinking and its formation in Estonia.

This issue of the *Estonian Journal of Ecology* includes five papers based on selected presentations made at the sub-sessions on aquatic ecosystems and GIS applications.

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Co-chairman of the Conference