

## Preface

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The papers in this special issue of Aquatic Ecology comprise the proceedings of the *First International Winter Limnology Symposium*, which was held from May 24 to 28, 2008, at the Kilpisjärvi Biological Station in Finnish Lapland. The symposium was a freshwater contribution to the International Polar Year (2007–2008), aimed to create and strengthen long-term studies of ice-covered water bodies. It was sponsored by the Academy of Finland (Grant 120138) and jointly organized by the Universities of Jyväskylä, Joensuu, and Helsinki. The main purpose of this meeting was to bring together experts in lake physics, chemistry, and biology to stimulate multidisciplinary thinking and discussion ranging from regional to global views. The primary objective of the symposium, therefore, was to enhance international collaboration in the research of

limnology and functioning of lake ecosystems during severe winter conditions.

The symposium attracted 50 participants from 14 countries. There were four plenary lectures dealing with physics (relating to snow and ice cover and liquid water body with its inverse temperature distribution and spring circulation), phytoplankton, zooplankton, and fish during ice-cover period in lakes. The presentations included several interesting topics and approaches, which covered the main domains of winter limnology and its importance in interpreting the annual course of limnological phenomena. Some of the papers emphasized on the need to study the impact of climate change on seasonally ice-covered lakes. The anticipated changes in the duration of ice cover, ice and snow thickness, and water temperature can have profound influence on physics and consequently also on chemistry and biology of large lakes.

During the meeting deliberations, an enthusiastic atmosphere developed with lot of discussions, which stimulated thinking over a wide perspective, based on regional and global outlook. Within the year following the symposium, several new contacts have developed among the participants. Another pointer to the success of the Kilpisjärvi meeting was the interest of several participants to continue the winter limnology symposia on biannual basis: German scientists took the initiative to host the second Winter Limnology Symposium in 2010. Thus, an informal network was rather spontaneously created to prop up

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research in winter limnology to bear fruits in near future.

Lastly, while editing this Special issue, our common belief has been further strengthened that the

*First Winter Limnology Symposium* successfully achieved its main goal of promoting limnological research in ice-covered lakes.