

Foreword

This special issue of *Acta Theriologica* presents part of the contributions to the third international meeting on "Ecological Genetics in Mammals" held at Kiel University from 1st to 6th September 1996. This meeting was part of a series of conferences held every two years, and so far hosted by the University of Łódź in 1992 (*Acta Theriologica*, Supplement 2, 1993) and in 1994 (*Acta Theriologica*, Supplement 3, 1995).

Fifty-three participants from seventeen countries (Austria, Belgium, Bulgaria, Denmark, France, Germany, Great Britain, India, Israel, Italy, Myanmar, Norway, Poland, Russia, South Africa, Sri Lanka, and the USA) attended the meeting. It was the aim of the organizers to bring together mammalogists with special interest in population biology and genetics to exchange ideas and to promote the development of concepts for interdisciplinary studies on mammalian populations.

A total of forty-one oral contributions were presented in the three sections highlighting the meanwhile traditional framework of topics: (1) Genetic variation, morphological variation, and developmental homeostasis, (2) Conservation genetics, and (3) Genetic variation, mating systems, and population structure. This time the section on conservation genetics focused on Asian elephant, and thanks to the invaluable efforts of Dr Fred Kurt, Institut für Haustierkunde, Kiel University, it was possible to invite several renowned elephant researchers from various countries. Dr Claus Hagenbeck contributed to this section by inviting the participants of the meeting for a very pleasant and informative visit at Carl Hagenbeck's Tierpark, Hamburg-Stellingen, with its large and thriving group of Asian elephants.

Papers submitted for publication in this issue have been peer reviewed and 14 of them could be accepted. The first section of the issue comprises reports of research at various levels of biological integration, ranging from genetic and environmental components involved in the development of morphological characters and fluctuating asymmetry to concerted patterns of genotypic and phenotypic change at "Evolutionary Canyon". The second section covers only part of the elephant-related talks. Because of restricted space, the editors decided to include only papers on molecular and morphological variation in the present issue, while the contributions referring to status, management, reproduction physiology, and behaviour will be published elsewhere. Some diversity as to species and problems addressed in the conservation genetics section is provided by two

contributions on European bison and a paper on the genetics of the last autochthonous red deer population in Italy. The third section on genetic variation in relation to mating systems and population structure contains one more theoretical paper on the very topic of the session as applies to ungulates, one paper addressing the influence of hunting on allele frequency distributions in reindeer, and a set of case studies evaluating the resolution power of RAPD-PCR, microsatellite profiling, and sequencing of the mtDNA control region.

The editors express their sincere thanks to all contributors, referees, and to sponsors, both of the meeting and the proceedings (Kiel University, Germany, Łódź University, Poland, and The State Committee for Scientific Research, Poland). We are very grateful to our colleagues and students at the Institut für Haustierkunde, Kiel University, who assisted in organizing this conference. Special thanks are due to Prof Z. Pucek, Editor-in-Chief of *Acta Theriologica* for inviting us to publish our proceedings in this journal. He and the editorial staff provided invaluable help with their experience in editorial work.

Günther B. HARTL and Janusz MARKOWSKI