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Herausgegeben im Auftrag der
Deutschen Zoologischen Gesellschaft
von Martin Lindauer

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Proceedings of the 1st International Symposium on Vertebrate Morphology Giessen, 1983

Edited by
H.-R. Duncker and G. Fleischer

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Foreword

The aim of this symposium was to generate a broader international communication among vertebrate morphologists for the exchange of ideas and experiences. This seems to us to be very necessary today, because morphology in the last two decades has become increasingly important for a better understanding of organisms and human beings. However, morphologists have a very weak position in most institutions and grant spending organizations. This position needs strengthening. We hope that closer international contact and stimulation will help this situation. Due to the fact that vertebrate morphologists are working in a variety of different disciplines, from anthropology to human- and veterinarian anatomy, zoology and paleontology, only to name the main disciplines, we have no separate society supporting such a meeting as ours. Therefore, in 1980 we started editing an international vertebrate morphologists directory as the basis of communication. We do not feel that it is necessary to form a separate society for vertebrate morphology. However, it is our belief that it is necessary to introduce an international congress series on vertebrate morphology with a regular three-year cycle as a platform for the exchange of ideas in a relaxed environment.

Special thanks should be given to two senior vertebrate morphologists who have helped substantially in the organization of this symposium through their continuous advice, discussions and intensive personal engagement in the preparation of this meeting: Prof. Dr. Dr. h. c. Dietrich STARCK, Frankfurt/Main, who has represented vertebrate morphology in Germany for half a century, even during those times in which morphology was thought to be only a relic from the last century. Cordial thanks are also extended to Prof. Carl GANS, PhD, Ann Arbor, Michigan, who has made outstanding contributions in functional vertebrate morphology, and who 20 years ago initiated the establisment of a vertebrate morphology section of the American Society of Zoologists and thereby considerably promoted this discipline.

The international economical situation with the reduction of financial support to science made it difficult to organize an international conference. An attempt was made to reduce all costs as much as possible, especially by engagement of our coworkers in the organisation and performance of all the necessities for the congress. The remaining costs could only be covered by the financial support from a number of organizations and individuals, without which this meeting could not have taken place.

Firstly, for financial support we would like to express our appreciation to the Deutschen Forschungsgemeinschaft who donated the principal funding and to the Deutschen Akademischen Austauschdienst, to the Dean of our Medical School Prof. Dr. Dr. h. c. RINGLEB, and to the Hessischen Kultusminister, but also to the Mainzer Akademie der Wissenschaften and to the Giessener Hochschulgesellschaft. We are especially thankful to some of our colleagues at the University of Giessen for their generous contributions, and also for support from the following companies: Behringwerke, Marburg; Ferber, Giessen; R. Jung, Heidelberg; E. Leitz, Wetzlar; Carl Zeiss, Oberkochen.

It was our intention with this conference to stimulate international exchange in morphology, which has received new and increasing importance in biology and medicine as a countermovement to the present reductionism in these disciplines. It is our hope that this conference initiated a series of forthcoming meetings which will act as an impetus for the fruitful development of vertebrate morphology.

It is our hope that this volume will give a cross-section of research on vertebrate morphology today. We want to thank all active contributors, especially those scientists, who accepted an invitation to present a review lecture. The contributions deliver a survey of current research and are the basis for a broad orientation in different fields of present-day vertebrate morphology.

Prof. Dr. Dr. h. c. Martin LINDAUER generously accepted this volume to be published in the Series Fortschritte der Zoologie.

For the editorial accomplishments in putting this volume together we are extremely grateful to Mrs. Andrea RIESE (Giessen), who typed the manuscripts and handled most of the complex and tedious computer work. Dr. R. L. SNIPES (Giessen) was so kind to undertake the language revision.

H.-R. DUNCKER
G. FLEISCHER

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Introduction

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