# FOREWORD

This collection of papers stems from a series of presentations in the 'Eco-logy of Neotropical Mammals' symposium held at the IV International Theriological Congress in Edmonton, Canada on 19 August 1985. The symposium had its origins in a conversation between Bill Glanz and myself in June 1983 at the annual meeting of the American Society of Mammalogists in Gainesville, Florida. Then, as now, it seemed especially appropriate that the first Theriological Congress to be held in the Americas should have a symposium on neotropical mammals. Encouraged by Bill Fuller, Secretariat of the IV I.T.C., we drew up a tentative list of participants and topics, and Roberto Murúa of the Universidad Austral de Chile, Valdivia, readily agreed to serve as the symposium co-convener. Little did I imagine the organizational work that was to ensue over the next two years; by my conservative estimate, more than 200 letters were exchanged between myself, prospective participants, and the I.T.C. Secretariat. Nevertheless, the result is now history; the symposium involving ten oral presentations and seven posters was held and people from five countries, including Belgium, Chile, Uruguay, Venezuela, and the United States, were involved. If the number of participants from Latin American countries was less than we had hoped due primarily to financial limitations, at least a broad range of topics and mammals were covered; the latter included marsupials, bats, rodents, lagomorphs, edentates, camelids, and carnivores. The impetus to publish at least a major part of the results of this symposium in an issue of the Revista Chilena de Historia Natural came from conversations between myself and the journal editors, Ernst R. Hajek and Fabián M. Jaksić.

A review of Table 1 listing the oral presentations and posters given in Edmonton indicates that mammalogy in the Neotropics has come a long way from the first biological collections of Darwin, Humboldt and others. For example, the subject matter of the seven posters ranged from trophic relationships (Le Boulengé & Meserve; Martino & Aguilera) to population biology (Aguilera & Rondón; Cordero; Meserve et al.) social behavior (Franklin), and natural history (Lessa et al.). As might be expected, the subject matter of the oral presentations was broader, ranging from population dynamics (Murúa; O'Connell; Vivas) to community structure and organization (Fleming; Willig; Lacher & Mares; Glanz), and the role of specific consumer groups and interspecific interactions (Emmons; Jaksić; Redford). Thus, the study of mammals in the Neotropics has expanded considerably from the traditional emphasis on their systematics and natural history. This is not to say that additional studies in these areas are not still urgently needed in the Neotropics, especially in tropical regions. Rather, it is an acknowledgment that, in many cases, ecologists are focusing on general aspects of population and community ecology of neotropical mammals and attempting to relate this information to current theory. What we very often find is that neotropical mammals exhibit a diversity of adaptations, species interactions, and modes of community organization which do not conform to patterns elucidated elsewhere. Sometimes it seems that there are more examples of ecological divergence than convergence here!

Non-natives or "gringos" such as myself first setting foot in the Neotropics (in my case, in central mediterranean Chile in 1973, after my previous

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southernmost penetration had been only to Baja California!) are immediately struck by the novelty and potential for discovery here. There is so much to see and do, and, it seems, so little time available. Unfortunately, this sometimes leads to a certain myopia and over-zealous possessiveness so aptly described by D. L. Pearson in a recent letter to the Bulletin of the Ecological Society of America (66: 333, 1985). However, I have been encouraged by increasing cooperative efforts between U.S. and Latin American researchers supported by government agencies and international conservation groups. These have led to an explosion of our knowledge of neotropical mammals and a much greater appreciation of their diversity and special character. Along the same line, I hope that the publication of a major part of the papers presented at the neotropical mammals symposium in the Revista Chilena de Historia Natural will, in some small way, foster greater communication between mammalian ecologists working in the Neotropics. We are, after all, concerned with the same unique fauna that is coming under increasing pressure as more and more neotropical habitat is irreversibly altered or disappears.

I would like to extend special thanks to people and organizations instrumental in the development of the symposium and publication of a major part of the proceedings. Bill Glanz and Bill Fuller provided the initial inspiration and encouragement to organize the symposium. Through the heroic efforts of Bill Fuller, Secretariat of the IV I.T.C., financial support for the Latin American participants was provided from the following Canadian agencies: The National Science and Engineering Research Council. the Department of Environment, and the Alberta Fish and Wildlife Division, Department of Energy and Natural Resources (Alberta). The Sociedad de Biología de Chile and Editors Ernst Hajek and Fabián Jaksić extended the initial invitation to publish the proceedings, and provided logistical support during the editing process. The following people graciously served as ad hoc reviewers of submitted manuscripts: P. V. August, D. P. Christian, P. Dalby, J. F. Eisenberg, J.S. Findley, W.E. Glanz, G.L. Graham, D.T. Krohne, R.E. Martin, V.L. Naples, J.A. Simonetti and D.E. Wilson. I thank the symposium participants for their continued interest and cooperation in the long organizational and publication process. Finally, I extend my special thanks to Roberto Murúa, Fabián Jaksić, and Bill Glanz for their continued encouragement and support throughout this experience.

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## TABLE 1

## List of papers and posters presented at the Ecology of Neotropical Mammals symposium, IV International Theriological Congress, Edmonton, Alberta on 19 August 1985.

Lista de comunicaciones orales y de panel presentadas en el simposio Ecología de Mamíferos Neotropicales, durante el IV Congreso Theriológico Internacional, Edmonton, Alberta, el 19 de agosto de 1985.

### **Oral Presentations**

#### Posters

THE FEEDING ECOLOGY OF OCELOTS (FELIS PARDALIS) IN SOUTHEASTERN PERU. L. H. Emmons, Division of Mammals, Smithsonian Institution, Washington, D.C. 20560, U.S.A.

COMMUNITY STRUCTURE OF NEOTROPICAL BATS. T.H. Fleming, Department of Biology, University of Miami, Coral Gables, Florida 33124, U.S.A.

THE STRUCTURE OF NEOTROPICAL MAMMAL COMMUNITIES: TEMPORAL CHANGES AMONG MAM-MALS IN CENTRAL PANAMA. W.E. Glanz, Department of Zoology, University of Maine, Orono, Maine 04469, U.S.A.

PREDATION UPON SMALL MAMMALS IN SHRUB-LANDS AND GRASSLANDS OF SOUTHERN SOUTH AMERICA: ECOLOGICAL CORRELATES AND PRE-SUMABLE CONSEQUENCES. F. M. Jaksić, Departamento de Biología Ambiental, Pontificia Universidad Católica de Chile, Casilla 114-D, Santiago, Chile.

THE STRUCTURE OF NEOTROPICAL MAMMAL COMMUNITIES: AN APPRAISAL OF CURRENT KNOWLEDGE. T. E. Lacher, Jr.; Huxley College of Environmental Studies, Western Washington University, Bellingham, Washington 98225, U.S.A., & M. A. Mares, Stovall Museum, University of Oklahoma, Norman, Oklahoma 73019, U.S.A.

REGULATION OF NUMBERS IN TWO NEOTROPICAL RODENT SPECIES IN SOUTHERN CHILE. R. Murúa, Instituto de Ecología y Evolución, Universidad Austral de Chile, Casilla 567, Valdivia, Chile.

POPULATION STABILITY OF NEOTROPICAL SMALL MAMMALS: THE INFLUENCE OF HABITAT AND BODY SIZE. M. A. O'Connell, Department of Zoology, Wildlife Biology Program, Washington State University, Pullman, Washington 99164-4220, U.S.A.

DIETARY SPECIALIZATION AND VARIATION IN TWO MAMMALIAN INSECTIVORES. K. H. Redford, Florida State Museum, University of Florida, Gainesville, Florida 32611, U.S.A.

POPULATION BIOLOGY OF RODENTS IN THE VE-NEZUELAN LLANOS. A. M. Vivas, Departamento de Estudios Ambientales, Universidad Simón Bolívar, Apartado 80659, Caracas 1081, Venezuela.

BAT COMMUNITY STRUCTURE IN THE NEOTRO-PICS: A TENACIOUS CHIMERA? M. R. Willig, Department of Biological Sciences and The Museum, Texas Tech University, Box 4149, Lubbock, Texas 79409, U.S.A. POPULATION ECOLOGY OF THE RODENT PROE-CHIMYS GUAIRAE AND ORYZOMYS TALAMANCAE IN VENEZUELA. M. Aguilera & M. Rondón, Departamento de Estudios Ambientales, Universidad Simón Bolívar, Apartado 80659, Caracas 1081-A, Venezuela.

POPULATION ECOLOGY OF OPOSSUM IN NORTH-ERN VENEZUELA. G. A. Cordero, Facultad de Ciencias, Instituto de Zoología Tropical, Universidad Central de Venezuela, Apartado 47058, Caracas 1041-A, Venezuela.

ONE ENVIRONMENT, TWO MAMMALIAN FAMILIES, THREE CONTINENTS, AND FOUR + UNGULATES = ONE SOCIAL SYSTEM! THAT IS, NEOTROPICAL CAMELIDS, YOU AREN'T SO SPECIAL AFTER ALL. W. L. Franklin, Department of Animal Ecology, 124 Science II, Iowa State University, Ames, Iowa 60011, U.S.A.

TROPHIC RELATIONSHIPS AMONG SMALL MAM-MALS IN A CHILEAN SEMIARID THORN SCRUB COMMUNITY: A REANALYSIS. E. Le Boulengé, Unité d'Ecologie, Université Catholique de Louvain, pl. Croix du Sud, 5, B-1348 Louvain-la-Neuve, Belgium, P. L. Meserve, Department of Biological Sciences, Northern Illinois University, DeKalb, Illinois 60115-2861, U.S.A.

BIOLOGY OF THE GENUS CTENOMYS (RODENTIA: OCTODONTIDAE) IN URUGUAY. E.P. Lessa<sup>1</sup>, C.A. Altuna<sup>2</sup>, A.F. Noveilo<sup>3</sup>, & M. Ubilla<sup>4</sup>, Department of Biology, Box 3AF, New Mexico State University, Las Cruces, New Mexico 88003, U.S.A.<sup>1</sup>; Departments of Vertebrate Zoology<sup>1</sup>, Biology<sup>2</sup>, Microscopy<sup>3</sup>, and Paleontology<sup>4</sup>, Facultad de Humanidades y Ciencias, Tristán Narvaja 1674, Montevideo, Uruguay.

STUDY OF FOOD HABITS OF A COMMUNITY OF RODENTS IN RICE-FIELDS OF VENEZUELA. A. Martino & M. Aguilera, Departamento de Estudios Ambientales, Universidad Simón Bolívar, Apartado 80659, Caracas 1081-A, Venezuela.

SMALL MAMMAL POPULATION DYNAMICS IN A SOUTHERN CHILEAN TEMPERATE RAIN FOREST. P.L. Meserve & B.K. Lang, Department of Biological Sciences, Northern Illinois University, DeKalb, Illinois 60115-2861, U.S.A., R. Murúa & L.A. González, Instituto de Ecología y Evolución, Universidad Austral de Chile, Casilla 567, Valdivia, Chile.