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Contributions on vertebrate paleontology in Venezuela

Preface

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Venezuela, located in the septentrional area of South America in the Caribbean, is considered one of the "megadiverse" countries in the world, belonging to the list of 15 countries with highest species diversity (RODRÍGUEZ & ROJAS-SUÁREZ 1999), including vertebrates of all kinds, many currently being described (e.g., LEW et al. 2006). This richness is in contrast with one of the poorest known vertebrate fossil records in the continent. This is regrettable, as Venezuela has been hypothesized to have been at critical geographical positions to understand biogeographic and evolutionary patterns at different times during the Phanerozoic (e.g., ITURRALDE-VINENT & MACPHEE 1999; YOUNG & MODY 2002). Venezuela is situated in tropical America, and the tropics have been hypothesized as being cradle and museum for evolution: centers of origin of vertebrate diversity and reservoirs of basal clades extinct in higher latitudes (JABLONSKI et al. 2006). The Orinoco river is also a major reservoir of freshwater diversity and its past history must have been a fundamental factor in shaping the communities of organisms that inhabit the northern Neotropics. The total area of Venezuela is little over 900.000 km^2, and from it a contribution to the understanding of the biochronology of South American vertebrates, so much biased towards the Southern cone, is expected.

The first step to study evolutionary patterns in deep time is describing the paleobiodiversity. In this collection of papers, we continue our ongoing efforts to study Venezuelan vertebrate paleontology by bringing into print descriptions and reviews of taxa from a geochronology sequences in different sedimentary basins and paleoenvironments (AGUILERA 2004, 2006; SÁNCHEZ-VILLAGRA & CLACK 2004; SÁNCHEZ-VILLAGRA 2006). Besides the descriptions of the results of our own collecting efforts, we have organized the study of material in existing collections mostly in the cities of Coro, Uru-

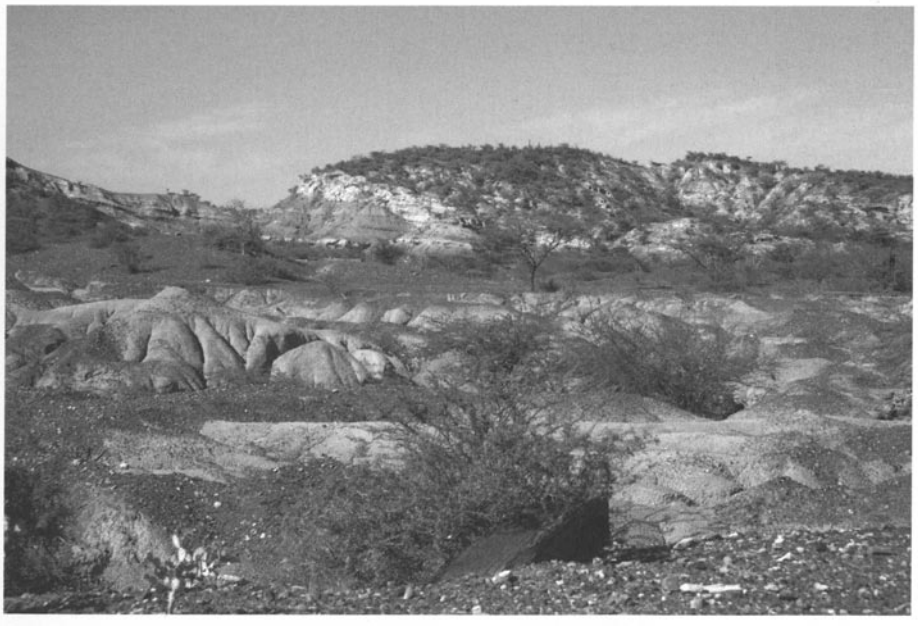

Fig. 1. The classic Urumaco locality of "El Mamón", where many significant fossil vertebrates have been found and where some of the early oil exploration in the area was conducted. Photo courtesy of Fernando Acosta (Universidad Nacional Experimental Francisco de Miranda).

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maco, Caracas, and Maracaibo. Collaborations with experts on different taxonomic groups have made this possible, and we are grateful to the invited authors for their excellent contributions.

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