

Preface

The Neotropics comprise the tropical areas of the Americas, from Mexico to Argentina. Hundreds of biogeographic studies of plant and animal taxa from this region have been published for more than 150 years, producing a basic knowledge that is synthesized into regionalization schemes. In this book, I address two central questions of evolutionary biogeography: which areas are recognized within the Neotropical region and how did their biotas evolve? In the last few decades, molecular phylogenetics and parametric model-based biogeography have allowed the postulation of complex biogeographic scenarios for particular taxa, and the search for biotic patterns has been somewhat neglected. However, I feel that biogeographic regionalizations based on the distributional patterns of plant and animal taxa are still relevant in the twenty-first century because they constitute the background knowledge of systematic, ecological, evolutionary, and other kinds of studies.

The biogeographic regionalization of the Neotropical region presented herein consists of three subregions, two transition zones, seven dominions, and 53 provinces. For each unit, I provide the valid name according to the International Code of Area Nomenclature (ICAN) followed by a list of citations and synonyms, a brief characterization, and some endemic and characteristic taxa. In order to deal with biotic evolution, I refer to the identification of biotas through areas of endemism and generalized tracks, their relationships based on track and cladistic biogeographic analyses, and, when possible, the cenocrons or biotic subsets that have been identified within them. This attempt of synthesis is based on a vast bibliography that I have compiled for more than two decades. I feel grateful to many authors who have provided insights on the regionalization and evolution of the Neotropical region. Particularly inspirational for my work were Jorge Artigas, Ángel L. Cabrera, Joel Cracraft, León Croizat, Philip Darlington, Gonzalo Halffter, Michael Heads, René Jaumez, Guillermo Kuschel, Emilio Maury, Ernst Mayr, Paul Müller, Eduardo Rapoport, Osvaldo Reig, Raúl Ringuelet, Donn E. Rosen, Jerzy Rzedowski, Jay Savage, George G. Simpson, Arne Takhtajan, Alfred R. Wallace, and Abraham Willink.

I thank Lone Aagesen, Tania Escalante, Cecilia Ezcurra, Livia León-Paniagua, Ivette Lana, Silvio Nihei, Sergio Roig-Juñent, and Luis Sánchez-González for providing useful comments on a preliminary version of the manuscript. Many friends and colleagues provided useful discussions, helped with the bibliography, provided time, and shared their ideas with me: Lone Aagesen, Dalton de Sousa Amorim, Luciano Arana, Fabrizio Cecca, Jorge Crisci, Guadalupe del Río, Malte C. Ebach, Juanjo Echeverry, Tania Escalante, Celene Espadas, David Espinosa, Cecilia Ezcurra, Ignacio Ferro, Ismael Ferrusquía-Villafranca, Gustavo Flores, Oscar Gómez-Villota, Jorge Fontenla, Irene Goyenechea-Mayer, Gonzalo Halffter, Michael

Heads, Liliana Katinas, Analía Lanteri, Livia León-Paniagua, Jonathan Liria, Jorge Llorente-Bousquets, Peter Löwenberg-Neto, Isolda Luna-Vega, Juan Márquez-Luna, Andrés Moreira-Muñoz, Adolfo Navarro-Sigüenza, Paula Posadas, Alejandra Ribichich, Gerardo Rodríguez-Tapia, Sergio Roig-Juñent, Adriana Ruggiero, Luis Sánchez-González, Claudia Szumik, Estrella Urtubey, and Mario Zunino.

Juan J. Morrone

Mexico City