

CONTENTS

Foreword	<i>Patrick T. Gregory</i>	ix
Preface	<i>William I. Lutterschmidt</i>	xiii
Introduction	<i>William I. Lutterschmidt</i>	xvii
Chapter 1	A Philosophical View of Reptiles as Animal Models: The Role of Context and the Need for Research <i>Glenn M. Sanford</i>	1
	<i>Temperate Deserts</i>	
Chapter 2	Life and Locomotion in a Sea of Sand: Evolution of Web-Footed Geckos of the Namib <i>Aaron M. Bauer</i>	13
Chapter 3	Town and Country Lizards: Physiological Ecology of Side-Blotched Lizards Across a Variable Landscape <i>Geoffrey D. Smith, Leilani D. Lucas and Susannah S. French</i>	29
	<i>Tropical Deserts</i>	
Chapter 4	Life on the Cliffs: The Ontogeny of Habitat Selection and Diet Shifts in Spiny-Tailed Iguanas <i>Richard D. Durtsche</i>	51
Chapter 5	Reptile Species Richness and Distribution: What Can We Learn from Arid and Semiarid Environments? <i>Aurelio Ramírez-Bautista, Raciél Cruz-Elizalde and Uriel Hernández-Salinas</i>	75
Chapter 6	Reptile Tracks: An Indicator for Identifying Areas of High Diversity in Arid Zones of Mexico <i>Uriel Hernández-Salinas, Aurelio Ramírez-Bautista and Raciél Cruz-Elizalde</i>	95
Chapter 7	Visual and Chemical Signals of Social Communication: Providing the Link to Habitat and Environment <i>Diana K. Hews and Emília P. Martins</i>	111

Temperate Grasslands and Prairies

- Chapter 8** Adrenal Cell Secretion in the Italian Wall Lizard: Actions of Regulatory Neuropeptides **143**
Salvatore Valiante, Marina Prisco, Rosaria Sciarriello, Maurizio Forte, Anna Capaldo, Anna Sellitti, Piero Andreuccetti, Maria De Falco and Vincenza Laforgia
- Chapter 9** Coping with Invasive Invaders: Behavioral and Morphological Modifications of the Texas Horned Lizard **159**
Scott E. Henke
- Chapter 10** Horned Lizard Responses to Diverse Threats from Diverse Predators: Mental Constructs and Cognitive Worlds? **177**
Wade C. Sherbrooke
- Chapter 11** The Virtual Reptile: Mathematical Models and Simulations of Thermoregulatory Strategy **197**
John G. Alford
- Chapter 12** Social Life on the Rocks: Behavioral Diversity and Sexual Selection in Collared Lizards **213**
Troy A. Baird

Northern Climates of the Tundra and Boreal Forests

- Chapter 13** Life at the Edge: The Nesting Ecology of the World's Most Northerly Oviparous Snake and Its Implications for Conservation **247**
Mattias Hagman, Simon Kärnvemo, Johan Elmqvist and Kristin Löwenborg
- Chapter 14** Keeping Time in the Dark: The Neuroendocrinology of Seasonal Reproduction in Garter Snakes **265**
Deborah I. Lutterschmidt

Temperate Forests, Wetlands and Coastal Plains

- Chapter 15** From Forests to Grasslands: Life-History, Road Mortality, and Genetic Diversity of Box Turtles **291**
James C. Cureton II and P. Raelynn Deaton
- Chapter 16** Near the Water's Edge: Cottonmouth Spatial Ecology, Behavior, Cognition and Neurobiology **315**
Eric D. Roth
- Chapter 17** Crossing Higher Ground: Terrestrial Activity and Seasonal Timing of Reproduction in the Fully Aquatic Mud Snake **335**
William I. Lutterschmidt
- Chapter 18** From Marshes to Medicine: The Role of Immunological Defense in the American Alligator **351**
Mark E. Merchant

Tropical Forests and Wetlands

- Chapter 19** Hidden Giants: Problems Associated with Studying Secretive Invasive Pythons 367
Michael E. Dorcas and John D. Willson
- Chapter 20** Reptile Ecology, Adaptive Management and Assessment Techniques: Problems, Developments and Prospects 387
Michael O'Neal Campbell
- Chapter 21** Reptiles as Animal Models: Examples of their Utility in Genetics, Immunology and Toxicology 407
Gisela L. Poletta, Pablo A. Siroski, Patricia S. Amavet, Hugo H. Ortega and Marta D. Mudry

The Sea

- Chapter 22** Long-Term Ecological Research on America's Only Estuarine Turtle: The Diamondback Terrapin 447
Michael E. Dorcas and J. Whitfield Gibbons
- Chapter 23** Movement Mysteries Unveiled: Spatial Ecology of Juvenile Green Sea Turtles 463
Donna J. Shaver, Kristen M. Hart, Ikuko Fujisaki, Cynthia Rubio and Autumn R. Sartain
- Chapter 24** A Desert in the Sea: Water Relations of Marine Snakes 485
Harvey B. Lillywhite
- About Contributing Authors** 501
- Index** 507