

1. Record Nr.	UNINA9911047803903321
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Titolo	Andean Herpetofauna : Explorations of Diversity, Ecology, and Conservation / / edited by J. Nicolás Urbina-Cardona, Carlos A. Navas, Alessandro Catenazzi, Carla Piantoni
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2026
ISBN	3-032-00074-2
Edizione	[1st ed. 2026.]
Descrizione fisica	1 online resource (610 pages)
Collana	Sustainable Development Goals Series, , 2523-3092
Disciplina	596
Soggetti	Vertebrates Conservation biology Ecology Biotic communities Population biology Vertebrate Zoology Conservation Biology Terrestrial Ecology Community and Population Ecology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Prologue -- The Andes: the physical setting -- Beyond species richness: a behavioural perspective of the anuran diversity in the Andes of Colombia -- Functional diversity of amphibians and reptiles in tropical dry forest remnants and anthropogenic cover types in the Lower Bogotá River sub-basin (Department of Cundinamarca, Colombia) -- Biogeographic patterns of richness and endemism in Liolaemidae: identifying hotspots for the most diverse Andean reptile radiation -- The climatic niche evolution of South American squamates (Reptilia: Squamata) -- The shared evolutionary history of South America's mountain biotas: Genetic evidence from amphibians and reptiles -- Anurans of the Patagonian Andes: a little-known variety of reproductive and developmental strategies -- Unveiling Patagonian Lizards: A Three-Decade Journey through Ecology, Evolution, and Adaptation in a Changing World -- Drivers of physiological responses

and range distribution in the context of Rapaport's rule. The case of East Andean Liolaemidae lizard species -- Physiological ecology of Andean amphibians associated with freezing temperatures -- Thermal biology of squamate reptiles in the high mountains of the Northern Andes -- Thermal Adaptations in Tropical Andean Amphibians: Exploring Spatial Variability and Global Change Impacts -- Emerging infectious diseases of amphibians in the Andean region: An analysis pointing out the limits of current knowledge and underscored topics in which additional research is necessary -- Diversity and extinction risk of Colombian Andean amphibians across life regions -- Experiences in conservation planning for amphibians in the Andean region -- Andean snakes: understanding biodiversity knowledge shortfalls -- Herpetofauna of the Andes: A critical synthesis.

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#### Sommario/riassunto

This book provides a multidisciplinary perspective on the Andean herpetofauna, covering topics ranging from natural history and thermal ecology to biogeography and conservation. Extending over 8,900 kilometres across seven countries, the Andes represent one of the world's most exceptional biodiversity hotspots for amphibians and reptiles, including many endemic forms. This comprehensive volume presents the first integrative synthesis of Andean herpetofauna, organized into 18 chapters covering different disciplines. The first section focuses on diversity and distribution patterns across varied landscapes from humid Colombian páramos to arid central Andean punas. The second section explores evolutionary histories and life strategies, including viviparity, extended larval development, and physiological adaptations enabling species survival in harsh montane conditions. The third section examines ecological and physiological adaptation, including cold tolerance mechanisms, thermal biology, and freeze resistance in high-altitude environments. The fourth section addresses conservation challenges and emerging threats, including infectious diseases, climate change impacts, and critical knowledge gaps hindering effective conservation planning. It will be an invaluable resource for researchers, students, and conservation scientists interested in the biology and conservation of amphibians and reptiles inhabiting these remarkable montane ecosystems.

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