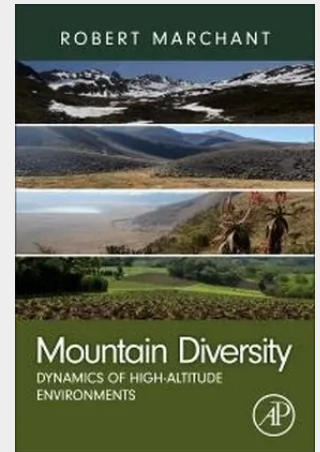


Mountain Diversity

Dynamics of High-Altitude Environments

Mountain Diversity: Dynamics of High-Altitude Environments explores the highly biodiverse, culturally rich, and often threatened mountain regions that comprise a quarter of the world's continental land surface. Mountains cover only 25% of global continental land surface yet are home to more than 85% of the world's amphibians, birds, and mammals, many of which are entirely restricted to mountains. Despite their importance as stores of biodiversity and drivers of global sustainability, mountains are particularly vulnerable to the impacts of climate change and how these interact with human populations and their livelihoods. Written by a leading expert in tropical mountain ecology, this book explores the processes that define the world's high-altitude areas in an easily digestible manner. Prof. Marchant collates paleoecological, archaeological, historical, and contemporary insights on mountain functioning to synthesize the interactions between mountain societies, ecosystems, and environments. Many mountain ranges remain completely unprotected despite their importance as storehouses of biodiversity and providing goods and services to the world, not least water, food and energy. Mountains are under increasing threat via population growth, climatic extremes, and land use changes. This book provides insight to what underpins current biodiversity across the world's mountains and uses this information to identify priorities for new ways to understand, value, protect, and conserve mountain areas for future generations.

Mountain Diversity: Dynamics of High-Altitude Environments explores the highly biodiverse, culturally rich, and often threatened mountain regions that comprise a quarter of the world's continental land surface. These complex areas play a fundamental role in shaping continental-scale climates and have long been recognized as globally important centers of biodiversity. Mountains cover only 25% of global continental land surface yet are home to more than 85% of the world's amphibians, birds, and mammals, many of which are entirely restricted to mountains. Despite their importance as stores of biodiversity and drivers of global sustainability, high altitude areas are particularly vulnerable to climate change and human interventions. Written by a leading expert in tropical mountain ecology, this book explores the processes that define the world's high-altitude areas in an easily digestible manner. Early chapters characterize high-altitude areas according to topography, fire regime, and climate. Dr. Marchant collates palaeoecological, archaeological, and historical insights to synthesize the intersection between mountain societies, ecosystems, and climate. Middle chapters examine the relationship between mountain climates and insect, bird, and mammalian biodiversity. Final chapters describe the future of land use, climate, and biodiversity, and explore opportunities to combine insights from different disciplines to enable pathways for more sustainable futures in sustainable mountain development. High-altitude regions are not adequately protected, and many mountain ranges remain completely unprotected. The status of these important storehouses of biodiversity is under increasing threat via population growth, climatic extremes, and land use change. High-Altitude Biodiversity will present current biodiversity across the world's mountains and use this information to identify priorities for new ways to understand, value, protect, and conserve high altitude areas. By taking a novel interdisciplinary approach that combines temporally and spatially diverse datasets from high altitude areas around the world, this can be used to inform future development.



142,50 €

142,50 € (zzgl. MwSt.)

vorbestellbar, Erscheinungstermin ca. August 2026

Artikelnummer: 9780443222511
Medium: Buch
ISBN: 978-0-443-22251-1
Verlag: Elsevier Science
Erscheinungstermin: 01.08.2026
Sprache(n): Englisch
Auflage: Erscheinungsjahr 2026
Produktform: Kartoniert
Gewicht: 450 g
Seiten: 250
Format (B x H): 152 x 229 mm

