

Climate Of The Romanian Carpathians Variability And Trends

This book provides an overview of innovative and new directions being chartered in South African tourism geographies. Within the context of global change the volume explores different facets and different geographies of tourism. Key themes under scrutiny include the sharing economy, the changing accommodation service sector, touring poverty, tourism and innovation, tourism and climate change, threats to sustainability, inclusive tourism and a number of studies which challenge the present-mindedness of much tourism geographical scholarship. The 18 chapters range across urban and rural landscapes in South Africa with sectoral studies which include adventure tourism, coastal tourism, cruise tourism, nature-based tourism, sports tourism and wine tourism. Finally, the volume raises a number of policy and planning issues in the global South in particular relating to sustainability, local economic development and poverty reduction. Outlining the impact of tourism expansion in South Africa and suggesting future research directions, this stimulating book is a valuable resource for geographers as well as researchers and students in the field of tourism studies.

In a worldwide context of ever-growing competition for water and land, climate change, droughts and man-made water scarcity, and less-participatory water governance, agriculture faces the great challenge of producing enough food for a continually increasing population. In this line, this book provides a broad overview of innovation issues in the complex water–agriculture–food nexus, thus also relative to their interconnections and dependences. Issues refer to different spatial scales, from the field or the farm to the irrigation system or the river basin. Multidisciplinary approaches are used when analyzing the relationships between water, agriculture, and food security. The covered issues are quite diverse and include: innovation in crop evapotranspiration, crop coefficients and modeling; updates in research relative to crop water use and saving; irrigation scheduling and systems design; simulation models to support water and agricultural decisions; issues to cope with water scarcity and climate change; advances in water resource quality and sustainable uses; new tools for mapping and use of remote sensing information; and fostering a participative and inclusive governance of water for food security and population welfare. This book brings together a variety of contributions by leading international experts, professionals, and scholars in those diverse fields. It represents a major synthesis and state-of-the-art on various subjects, thus providing a valuable and updated resource for all researchers, professionals, policymakers, and post-graduate students interested in the complex world of the water–agriculture–food nexus. This book discusses water resources management in Romania from a hydrological perspective, presenting the latest research developments and state-of-the-art knowledge that can be applied to efficiently solve a variety of problems in integrated water resources management. It focuses on a wide range of water resources issues – from hydrology and water quantity, quality and supply to flood protection, hydrological hazards and ecosystems, and includes case studies from various watersheds in Romania. As such, the book appeals to researchers, practitioners and graduates as well as to anybody interested in water resources management.

This book analyzes how climate change adaptation can be implemented at the community, regional and national level. Featuring a variety of case studies, it illustrates strategies, initiatives and projects currently being implemented across the world. In addition to the challenges faced by communities, cities and regions seeking to cope with climate change phenomena like floods, droughts and other extreme events, the respective chapters cover topics such as the adaptive capacities of water management organizations, biodiversity conservation, and indigenous and climate change adaptation strategies. The book will appeal to a broad readership, from scholars to policymakers, interested in developing strategies for effectively addressing the impacts of climate change.

This guide describes 27 short treks of 2-6 days and 10 day walks in the mountains of Romania. Although there is a slight focus on Transylvania, most of the main massifs are included, with chapters covering the Mountains of Maramures, the Eastern Carpathians, the mountains around Brasov, the Fagara?, the region between the Olt and the Jiu, the Retezat, the mountains of Banat and the Apuseni. Also included is an ascent of Moldoveanu, Romania's highest peak at 2544m. There is a wealth of advice to help you plan your trip and organise the logistics of your walk or trek. Some routes avail of the network of mountain huts; others offer opportunities to camp in attractive wild locations. Overviews and a route summary table make it easy to choose an appropriate excursion. Each route includes clear description and mapping, as well as notes on accommodation and access (some can be accessed by public transport, although others require either pre-arranged pick-up or hitchhiking). There are fascinating insights into Romania's colourful culture and history and appendices containing hut listings, useful contacts and a helpful glossary. The graded routes are as varied as Romania's diverse landscapes. They take in rolling hills, craggy karst peaks, glacial lakes and Europe's last virgin forests, with other highlights including Transylvanian castles, wooden churches, the Piatra Craiului ridge and the spectacular Sapte Scari (Seven Ladders) and Turda Gorges. Historic towns such as the medieval towns of Brasov and Sibiu and the spa resort of Vatra Dornei offer easy access to the mountains; other routes visit remote villages that have changed little over the centuries, where self-sufficiency is still very much the way of life. All in all, the guide is a perfect companion to discovering the unspoilt beauty of Romania's enchanting mountain regions.

This book focuses on Romania's more than 12,000 caves, which developed in limestone (including thermal water caves), salt, gypsum, and occasionally in sandstone. It examines these caves and related topics in a format suitable for cavers, while also addressing a broad range of aspects useful for students and researchers. Since the Institute of Speleology was first established by Emil Racovita in 1920, a great deal of research has been conducted on all cave and karst types. As such, the book examines a variety of scientific fields, including karst geology, hydrogeology, biospeleology, paleoclimatology, mineralogy and archaeology.

This book examines the relationship between Ukraine's Galician Hutsuls and the Carpathian landscape between 1848 and 1939. The author analyzes the intersections of ecology and culture in the history of the Carpathian Mountains, with a focus on the region's economy and biodiversity.

New and innovative scientific theories, discussion and explanations are presented on landform dynamics and evolution in Romania along with a comprehensive understanding of the geomorphological processes shaping the large variety of Romania's landscape. Thematically arranged the book deals with landform dynamics of specific relief types: glacial and periglacial, denudational, fluvio-denudational, fluvial, karst and coasts, as well as sediment fluxes, geomorphic hazards and risks. The authors are key scientists and researchers in the field and offer innovative views on research methods and concepts applied to the topics in question. This work will be of interest to students and researchers in geography, geomorphology, geology, environmental science, paleoclimatology and soil science as well as policy and decision-makers in spatial planning.

The Carpatho-Balkan Geomorphological Commission and the International Association of Geomorphologists (IAG) Carpatho-Balkan-Dinaric Regional Working Group, promote networking between researchers and the exchange of research experience. Following a brief introduction into the geology, climate, hydrology and land cover of the Carpatho-Balkan-Dinaric region, the book provides detailed information on research applying both traditional and innovative techniques and summarizes contemporary knowledge on recent geomorphic processes. It also presents studies of exogenic geomorphic processes from each country. The chapters on Poland, the Czech Republic, Slovakia, Ukraine, Hungary, Romania, Slovenia, Croatia, Serbia, Bulgaria and Macedonia examine the geomorphic processes in shaping the topography of each country. This volume also examines key geomorphic processes influencing land use and economic activities as well as contributions discussing processes under climate

change.

This book provides a general survey of Geocryology, which is the study of frozen ground called permafrost. Frozen ground is the product of cold climates as well as a variety of environmental factors. Its major characteristic is the accumulation of large quantities of ice which may exceed 90% by volume. Soil water changing to ice results in ground heaving, while thawing of this ice produces ground subsidence often accompanied by soil flowage. Permafrost is very susceptible to changes in weather and climate as well as to changes in the microenvironment. Cold weather produces contraction of the ground, resulting in cracking of the soil as well as breakup of concrete, rock, etc. Thus permafrost regions have unique landforms and processes not found in warmer lands. The book is divided into three parts. Part 1 provides an introduction to the characteristics of permafrost. Four chapters deal with its definition and characteristics, the unique processes operating there, the factors affecting it, and its general distribution. Part 2 consists of seven chapters describing the characteristic landforms unique to these areas and the processes involved in their formation. Part 3 discusses the special problems encountered by engineers in construction projects including settlements, roads and railways, the oil and gas industry, mining, and the agricultural and forest industries. The three authors represent three countries and three language groups, and together have over 120 years of experience of working in permafrost areas throughout the world. The book contains over 300 illustrations and photographs, and includes an extensive bibliography in order to introduce the interested reader to the large current literature. Finalist of the 2019 PROSE Awards.

The publication is an integrated assessment report on the state of, and trends related to, the environment of the Carpathian Mountains and wider region, retrospectively over the past 30 years and forward to 2020. This assessment is based on analyses of socio-economic and environmental processes and focuses on sustainable development issues, notably the environmental implications of human and economic activities. The Outlook section of the report presents three scenarios of future development for the Carpathians, exploring the relationship and synergies between policy decisions taken, the human situation and the natural environment. The report provides greater knowledge about the unique ecology and related environmental and human problems of the Carpathians, along with better information for sustainable decision-making in this unique region and, in particular, the implementation of the Carpathian Framework Convention.

Climate and Land Use Impacts on Natural and Artificial Systems: Mitigation and Adaptation provides in-depth information on the linkages between climate change and land use, how they are related, how land use is shifting over time, and the major global regions at risk for climate and land use changes. This comprehensive resource discusses climatic factors and processes that impact natural and artificial systems, as well as the relationship between climate change and both natural and man-made hazards. The book includes case studies and original maps to provide real-life examples of climate change and land use over regions around the globe. In addition, the book presents future perspectives on mitigation and adaptation of the climate change impact. Summarizes current research on land use and climate change Provides future perspectives on climate change using climate models Includes case studies to provide real-life examples from various countries Incorporates high level graphics, images, and maps to support reviews and case studies

The book includes a broad spectrum of perspectives from different scientific disciplines (both the natural and social sciences) as well as practical knowledge. It gives a new insight into the Carpathian mountain region

The Geomorphological Hazards of Europe contains an excellent balance of authoritative statements on the range and causes of natural hazards in Europe. Written in a clear and unpretentious style, it removes myths and concentrates on the basic facts. The book looks at the known distributions, processes and the underlying principles and focuses on the need for a true understanding of the scientific details so that a real contribution to hazard management can be made. A comprehensive treatment of scientific and management issues of hazards in Europe caused by natural or sometimes human induced earth surface processes are covered including floods, landslides, avalanches, glacier-, coastal-, karstic-, and volcanic hazards, soil erosion and subsidence. Leading researchers in the field of natural hazards and their mitigation have contributed to this nation by nation account covering 20 European countries. The individual chapters deal with the distribution of natural hazards within specific countries (quite often the first synthesis of the information available) and • provide a review of current research in the field • discuss the economic, engineering and policy responses in national hazard management • are complemented by an extensive bibliography. The volume is well illustrated with 207 figures of which 66 are photos and has an extensive general index and a complete index of place names. It is a major European contribution to the International Decade for Natural Disasters Reduction. The book will appeal to practitioners, managers, academicians, researchers, as well as graduate students in geomorphology, natural hazards research and environmental management.

European Glacial Landscapes: Maximum Extent of Glaciations brings together relevant experts on the history of glaciers and their impact on the landscape of the main regions of Europe. In some regions the largest recorded glaciations occurred before the Last Glacial Cycle, in one of the major glacial cycles of the Middle Pleistocene. However, the best-preserved evidence of glaciation in the landscape is from the Last Glacial Cycle (Late Pleistocene). The book also analyses these older glacial landforms that can sometimes still be seen in the landscape today. This analysis provides a better understanding of the succession of Pleistocene glaciations and the intervening interglacial periods, examining their possible continental synchrony or asynchrony of past glacier behaviour. The result of this analysis gives important new insights and information on the origin and effects of climatic and geomorphological variability across Europe. European Glacial Landscapes: Maximum Extent of Glaciations examines the landscapes produced by glaciers throughout Europe, the geomorphological effects of glaciations, as well as the chronology and evolution of the past glaciers, with the aim of understanding the interrelationship between glacial expansion and climate changes on this continent. This book is a valuable tool for geographers, geologist, environmental scientists, researchers in physics and earth sciences. Provides a synthesis that highlights the main similarities or differences, through both space and time, during the maximum recorded expansions of Pleistocene glaciers in Europe Features research from experts in glacial geomorphology, palaeo-glaciology, palaeo-climatology and palaeo-oceanography on glacial expansion in Europe Includes detailed color figures and maps, providing a comprehensive comparison of the glacial landscapes of European Pleistocene glaciers

The present volume deals with the course and effects of migrations in the east and south-east of Europe during the period between the tenth and the thirteenth century. The author's special focus is on Romanian communities and on nomadic tribes that came from the steppes and penetrated into the area north of the Danube Delta.

Palaeolimnology is one of the most rapidly developing fields of limnology. The primary objective of this volume is to present new palaeolimnological findings from eastern and central Europe. Although this area has sometimes received less attention than other areas of Europe, the lakes and mires, coupled with the variability in landscape and the local

differences in climate, provide unique opportunity for studying palaeolimnology. The volume starts with a review on late Quaternary records from the Carpathian region, followed by new results on the history of a crater lake, Lake Saint Ana, glacial lakes in the Tatra Mountains and Lake Bled in Slovenia. In addition, the various papers provide new insights on the development of lakes and bogs during the late glacial and Holocene, using a wide range of palaeolimnological proxies, including diatoms, pollen, microfossils, pigments, cladoceran remains, chironomids, chaoborids, stable isotopes and geochemistry. The motivation for collecting recent knowledge derives from the recognition of the importance, and applicability of palaeolimnological tools to help in defining "reference conditions" as designated within the Water Framework Directives and estimating influence of global climate change on surface waters.

Climate change and the related adverse impacts are among the greatest challenges facing humankind during the coming decades. Even with a significant reduction of anthropogenic greenhouse gas emissions, it will be inevitable for societies to adapt to new climatic conditions and associated impacts and risks. This book offers insights to first experiences of developing and implementing adaptation measures, with a particular focus on mountain environments and the adjacent downstream areas. It provides a comprehensive 'state-of-the-art' of climate change adaptation in these areas through the collection and evaluation of knowledge from several local and regional case studies and by offering new expertise and insights at the global level. As such, the book is an important source for scientists, practitioners and decision makers alike, who are working in the field of climate change adaptation and towards sustainable development in the sense of the Paris Agreement and the Agenda 2030.

This book focuses on managing risks and building resilience to climate change, showcasing experiences from research, field projects and best practices to foster climate change adaptation in Eastern Europe that can be implemented elsewhere. Climate change affects countries in Eastern Europe, i.e. the Western Balkans and Southeast Europe in a variety of ways. Apart from severe floods, there are reports of decreasing water reserves in the southern regions, and of gradual changes in biodiversity and agricultural production. In the South Caucasus area, for instance, climate change models project a decline in precipitation and suggest that it will continue to become drier this century. Many Eastern European countries, especially the non-EU ones, have weak national climate policies, and transboundary collaborations, as well as limited public engagement in matters related to climate change. As a result, climate change poses a serious threat to their economic stability and development and to the sustainable development of the region. The above state of affairs illustrates the need for a better understanding of how climate change influences Eastern Europe, and for the identification of processes, methods and tools that may help the countries and the communities in the region to adapt. There is also a perceived need to showcase successful examples of how to cope with the social, economic and political problems posed by floods/droughts in the region, especially ways of increasing the resilience of agriculture systems and of communities. Addressing this need, the book presents papers written by scholars, social practitioners and members of government agencies involved in research and/or climate change projects in Eastern Europe.

Central to this edited volume is the proposition that the mountainous border region of Southeastern Europe needs to become a special target of European Union scale, regional development policy-making. Vivid case studies from eleven Central and Southeast European states present diverse perspectives on this region's physical geography, economy and demographics and demonstrate the integrative potential of the geographic perspective in mountain research. Europe as a whole has a lot to gain from a "sustainable mountains" policy, especially in Southeast Europe. In their focus on the sustainable development of such areas, the chapters consider regional development policy, ecosystem services assessment, small-scale tourism, and forestry management. This book will be of interest to a wide audience, including academics, students, and practitioners in the fields of geography, ecology, and environmental studies.

The Red Lake is a natural barrier lake at the foot of the Hasmasu Mare Mountains in the Eastern Carpathian Range in Romania. It was formed when the Bicz River was blocked by a natural dam resulting from two landslides during an extreme heavy storm in 1837. This book presents an interdisciplinary and comprehensive study on the physical, chemical, geographical and ecological aspects of Red Lake (Lacu Rosu). The first three chapters cover the formation and geological setting and its relationship with the Bicz Gorges-Haghimas national park. Subsequent chapters present the sedimentological, morphological and hydrological evolution of this unique natural laboratory and climatological setting. The final chapters deal with ecological aspects of Red Lake waters and adjacent ecosystems such as wetlands and water resource management issues.

This book focuses on new and innovative spatial approaches based on smart solutions and developed in the field of geography and related interdisciplinary fields such as urban and regional studies, landscape ecology and ecosystem services. It includes contributions from a conference dedicated to the 100th anniversary of the Bulgarian Geographical Society. In turn, the book reveals how 21st-century geography is expected to facilitate the development of human capital and the knowledge society, while also offering place-specific solutions for sustainable regional development and utilization of the planet's natural and human capital to improve social wellbeing. This volume is intended for the global geographical research community, as well as professionals and practitioners in all fields that deal with space, including regional planners and environmental managers.

For the very first time, this book provides updated, integrated and organized, theoretical and methodological information on regional climate change and the associated environmental and socio-economic impacts on a regional scale. The most recent findings in the field of long-term climate change, which improve our understanding of the global climate puzzle, will be presented. Readers are introduced to state-of-the-art research in downscaling and GCMs, which involve the construction of reliable regional climate scenarios and the solution to key problems regarding the assessment of the impacts of climate change in the most important geographical areas of the world, from the Arctic to Antarctic regions, with special emphasis on the Northern

Hemisphere.

The complexity of current water resource management poses many challenges. Water managers need to solve a range of interrelated water dilemmas, such as balancing water quantity and quality, flooding, drought, maintaining biodiversity and ecological functions and services, in a context where human beliefs, actions and values play a central role. Furthermore, the growing uncertainties of global climate change and the long term implications of management actions make the problems even more difficult. This book explains the benefits, outcomes and lessons learned from adaptive water management (AWM). In essence AWM is a way of responding to uncertainty by designing policy measures which are provisional and incremental, subject to subsequent modification in response to environmental change and other variables. Included are illustrative case studies from seven river basins from across Europe, West Asia and Africa: the Elbe, Rhine, Guadiana, Tisza, Orange, Nile and Amudarya. These exemplify the key challenges of adaptive water management, especially when rivers cross national boundaries, creating additional problems of governance.

This first book devoted to Eastern Europe's most important wine-producing countries provides detailed information on the region's wine production history, climate and geography, and analyses the parts played by culture and politics in the development of these wine industries. Wine styles, important grape varieties and key wineries are detailed.

Breaza town in Prahova Valley was categorized and ranked as second in the world after Davos (Switzerland), in terms of air quality. With a mild climate, similar, but with an air slightly more powerful, are classified and resorts, Predeal, Poiana Brasov, Tusnad, Borsec, Campina, Busteni, Azuga, Sinaia, etc.. The Carpathian Mountains are the eastern wing of the great Central Mountain System of Europe, curving 1500 km (900 miles) along the borders of Austria, the Czech Republic, Slovakia, Poland, Ukraine, Romania, Serbia and Montenegro and northern Hungary. Romania contains by far the largest area of the Carpathians, and forms the eastern and southern boundaries of the region. 55.2% of the Carpathian region is located within Romania. 47.4% of Romanian territory is part of the Carpathian mountain range. The Romanian Carpathians are divided into three groups: Eastern Carpathians, Southern Carpathians and Western Carpathians. The highest peaks are in the Southern Carpathians - Moldoveanu (2544 m/8,346 feet) and Negoiu (2535 m/8,316 feet) The Carpathians' ensemble is characterized by its varied landscape owing to the different types of relief particularities (glacial, karstic, riverine, structural-lithological), the alternation of mountainous and depressions units, gorges and valleys and the diversity and configuration of the vegetation. They contain the highest concentration of large carnivores in Europe, with estimates of over 6000 brown bears, 2500 wolves and some 1750 lynx living in the region. The Romanian Carpathians represent an exceptional tourist attraction. The flora of the Carpathians includes 1350 species, among which 116 are endemic. The Carpathian floral year begins at the end of February - the beginning of March, with the colfoot, the snowdrop, the hollow wort and the pheasant's eye. The rose bay flowers at the beginning of June, when the mountain slopes above the juniper belt become red being covered by the splendid carpet of rose bay. It is indeed a sp

This 2001 book provides a selective annotated bibliography of the principal floras and related works of inventory for vascular plants. The second edition was completely updated and expanded to take into account the substantial literature of the late twentieth century, and features a more fully developed review of the history of floristic documentation. The works covered are principally specialist publications such as floras, checklists, distribution atlases, systematic iconographies and enumerations or catalogues, although a relatively few more popularly oriented books are also included. The Guide is organised in ten geographical divisions, with these successively divided into regions and units, each of which is prefaced with a historical review of floristic studies. In addition to the bibliography, the book includes general chapters on botanical bibliography, the history of floras, and general principles and current trends, plus an appendix on bibliographic searching, a lexicon of serial abbreviations, and author and geographical indexes.

This book integrates the different prospective, scientific and practical experience of researchers as well as beneficiaries and stakeholders in the field of forest conservation in Southeast Europe. The book stresses the importance of improving the adaptability of these ecosystems to the impacts of climate change. Gathered around a common idea, the book presents the latest results in forest genetic resources conservation at national and regional level. The chapters are written by experts from: Bosnia and Herzegovina, Bulgaria, Croatia, FYR Macedonia, Greece, Montenegro, Romania, Serbia and Slovenia. The book presents the current state, legal and institutional framework for conservation and management of forest genetic resources, case studies and best practices in the application of different conservation methods and techniques (in situ and ex situ) as well as climate change aspects in this area. This book will be of particular interest to scientists and experts in the field of forestry, environmental protection and rural development, bachelor, master and doctoral students, as well as for anyone interested in the conservation issues fuelled by ethical and economic motives.

This book brings together contributions from experts in water management, scientists, researchers, academics and lecturers, sharing experiences and successes in this field. It is devoted to a wide range of water resources management issues, including water quality to water quantity, considering all impacts of water issues in the environment. The book presents international approaches to the latest developments in both the fundamental bases and the applicability of state-of-the-art knowledge that can be effectively used for solving a variety of large problems in integrated water resources management. The main focus of the book is on water pollution - physical, chemical, biological, and geographical pollution, hydrology problems, and limnology tasks. This series focuses on the new member states of the European Union. Each book is highly illustrated with colour photographs, maps and drawings. Topics covered include culture, history, geographical features, climate and the economy.

Climate of the Romanian Carpathians Variability and Trends Springer

This book is a comprehensive climatic monograph, which addresses one of the most complex mountain environments in Europe, the Carpathians Chain, focusing on the branches that lie over Romania. The volume aggregates high quality input data, state-of-the-art techniques, regional analysis and overview perspectives, while addressing the spatial and temporal patterns of the main climatic elements. The study covers the period 1961-2010, for the present climate, while the perspective is extended up to 2050. The main climatic elements (e.g. air temperature, precipitation, wind) are analyzed, but some specific variables like snow depth and snow cover are also examined, both in terms of average behaviour and extreme characteristics. This is the first synthesis addressing the climate of this mountain region, and it provides useful information for scientists, mountain stakeholders, decision-makers and general public.

Beginning with an overview of data and concepts developed in the EU-project HABIT-CHANGE, this book addresses the need for sharing knowledge and experience in the field of biodiversity conservation and climate change. There is an urgent need to build capacity in protected areas to monitor, assess, manage and report the effects of climate change and their interaction with other pressures. The contributors identify barriers to the adaptation of conservation management, such as the mismatch between planning reality and the decision context at site level. Short and vivid descriptions of case studies, drawn from investigation areas all over Central and Eastern Europe, illustrate both the local impacts of climate change and their consequences for future management. These focus on ecosystems most vulnerable to changes in climatic conditions, including alpine areas, wetlands, forests, lowland grasslands and coastal areas. The case studies demonstrate the application of adaptation strategies in protected areas like National Parks, Biosphere Reserves and Natural Parks, and reflect the potential benefits as well as existing obstacles. A general section provides the necessary background information on climate trends and their effects on abiotic and biotic components. Often, the parties to policy change and conservation management, including managers, land users and stakeholders, lack both expertise and incentives to undertake adaptation activities. The authors recognise that achieving the needed changes in behavior – habit – is as much a social learning process as a matter of science-based procedure. They describe the implementation of modeling, impact assessment and monitoring of climate conditions, and show how the results can support efforts to increase stakeholder involvement in local adaptation strategies. The book concludes by pointing out the need for more work to communicate the cross-sectoral nature of biodiversity protection, the value of well-informed planning in the long-term process of adaptation, the definition of acceptable change, and the motivational value of exchanging experience and examples of good practice.

This is a Special Issue of Atmosphere presenting recent results of experimental and theoretical investigations of atmospheric compositions and clouds, largely based on remote sensing.

[Copyright: 9c7d33e5f4013296215832373a471a8b](#)