

Temperate And Boreal Rainforests Of The World Ecology And Conservation

Getting the books **Temperate And Boreal Rainforests Of The World Ecology And Conservation** now is not type of inspiring means. You could not only going gone book deposit or library or borrowing from your contacts to admission them. This is an no question simple means to specifically acquire guide by on-line. This online message Temperate And Boreal Rainforests Of The World Ecology And Conservation can be one of the options to accompany you later than having supplementary time.

It will not waste your time. believe me, the e-book will enormously melody you extra issue to read. Just invest tiny become old to edit this on-line publication **Temperate And Boreal Rainforests Of The World Ecology And Conservation** as capably as evaluation them wherever you are now.

Forest Biomass T. Satoo 2012-12-06 Lord Rutherford has said that all science is either physics or stamp collecting. On that basis the study of forest biomass must be classified with stamp collecting and other such pleasurable pursuits. Japanese scientists have led the world, not only in collecting basic data, but in their attempts to systematise our knowledge of forest biomass. They have studied factors affecting dry matter production of forest trees in an attempt to approach underlying physical principles. This edition of Professor Satoo's book has been made possible the help of Dr John F. Hosner and the Virginia Poly technical Institute and State University who invited Dr Satoo to Blacksburg for three months in 1973 at about the time when he was in the final stages of preparing the Japanese version. Since then the explosion of world literature on forest biomass has continued to be fired by increasing shortages of timber supplies in many parts of the world as well as by a need to explore renewable sources of energy. In revising the original text I have attempted to maintain the input of Japanese work - much of which is not widely available outside Japan - and to update both the basic information and, where necessary, the conclusions to keep them in tune with current thinking. Those familiar with the Japanese original will find Chapter 3 largely rewritten on the basis of new work - much of which was initiated while Dr Satoo was in Blacksburg.

Tongass Odyssey John Schoen 2020 "John Schoen's Tongass Odyssey is both a memoir and a scientific manuscript. As a memoir it offers authorial stories related to Schoen's dealings in the Tongass National Forest; as a science-based manuscript it addresses the ecological and political history of the past 50 years of the Tongass. It also addresses the responsibility of conservation practitioners regarding the consequences of public lands and water management"--

Encyclopedia of Environmental Change John A Matthews 2013-12-13 Accessibly written by a team of international authors, the Encyclopedia of Environmental Change provides a gateway to the complex facts, concepts, techniques, methodology and philosophy of environmental change. This three-volume set illustrates and examines topics within this dynamic and rapidly changing interdisciplinary field. The encyclopedia includes all of the following aspects of environmental change: Diverse evidence of environmental change, including climate change and changes on land and in the oceans Underlying natural and anthropogenic causes and mechanisms Wide-ranging local, regional and global impacts from the polar regions to the tropics Responses of geoecosystems and human-environmental systems in the face of past, present and future environmental change Approaches, methodologies and techniques used for reconstructing, dating, monitoring, modelling, projecting and predicting change Social, economic and political dimensions of environmental issues, environmental conservation and management and environmental policy Over 4,000 entries explore the following key themes and more: Conservation Demographic change Environmental management Environmental policy Environmental security Food security Glaciation Green Revolution Human impact on environment Industrialization Landuse change Military impacts on environment Mining and mining impacts Nuclear energy Pollution Renewable resources Solar energy Sustainability Tourism Trade Water

resources Water security Wildlife conservation The comprehensive coverage of terminology includes layers of entries ranging from one-line definitions to short essays, making this an invaluable companion for any student of physical geography, environmental geography or environmental sciences.

Caribou Rainforest David Moskowitz 2018 "The story of the southernmost herd of caribou in the world and the inland temperate rainforest, the ecosystem they depend on to survive. David Moskowitz examines all the factors at play: predators, climate change, recreationists, industrial logging, mineral extraction and discusses how we can protect what remains of this rare rainforest ecosystem"--

The Fate of the Forest Susanna B. Hecht 2010 Susanna Hecht and Alexander Cockburn show the panorama of destruction as it unfolded, and also reveal the extraordinary turnaround that is now taking place, thanks both to the social movements and the emergence of new environmental markets. Exploring the role of human hands in destroying and saving this vast forested region, The Fate of the Forest pivots on the murder of Chico Mendes, a legendary labor and environmental organizer who was assassinated after successful confrontations with big ranchers. A multifaceted portrait, complete with a new preface and afterword by the authors, this book demonstrates that those who would hold a mirror up to nature must first learn the lessons offered by some of their own people. --Book Jacket.

Imperiled: The Encyclopedia of Conservation 2022-07-15 Humanity's ecological footprint is expanding at an alarming pace. With climate change, increases in human population and consumption levels, and other anthropogenic factors, nearly half the known species on Earth could soon be gone. The near collapse of entire ecosystems has already occurred. We are facing a huge sustainability issue. This Encyclopedia, in 3 volumes, proposes a global synthesis detailing the world's imperiled species and ecosystems. It documents rarity and endangerment, the major drivers of loss, areas of conservation importance, and implementation strategies to save and restore imperiled species and ecosystems. It is a first of its kind coverage of Earth's imperiled species and ecosystems in one comprehensive encyclopedia. Comprehensive - First of its kind coverage of Earth's imperiled species and ecosystems in one source, including recommendations for sustainability and conservation Global appeal - Includes global and regional applications with an emphasis on the integration of biology, geography, and land-use Reader-friendly - Top notch scientific articles written in easy-to-understand language and including strong visual graphics *The Carbon the World Forgot* Matt Carlson 2009 [This report] identifies the boreal forests of North America as not only the cornerstone habitat for key mammal species, but one of the most significant carbon stores in the world, the equivalent of 26 years of global emissions from burning fossil fuels, based on 2006 emissions levels. Globally, these forests store 22 percent of all carbon on the earth's land surface.

Global Change and Forest Soils 2019-11-23 Global Change and Forest Soils: Cultivating Stewardship of a Finite Natural Resource, Volume 36, provides a state-of-the-science summary and synthesis of global forest soils that identifies concerns, issues and opportunities for soil

adaptation and mitigation as external pressures from global changes arise. Where, how and why some soils are resilient to global change while others are at risk is explored, as are upcoming trends and success stories across boreal, temperate, and tropical forests. Each chapter offers multiple sections written by leading soil scientists who comment on wildfires, climate change and forest harvesting effects, while also introducing examples of current global issues. Readers will find this book to be an integrated, up-to-date assessment on global forest soils. Presents sections on boreal, temperate and tropical soils for a diverse audience Serves as an important reference source for anyone interested in both a big-picture assessment of global soil issues and an in-depth examination of specific environmental topics Provides a unique synthesis of forest soils and their collective ability to respond to global change Offers chapters written by leading soil scientists Prepares readers to meet the daily challenges of drafting multi-resource environmental science and policy documents

Global Biodiversity in a Changing Environment F. Stuart Chapin 2013-12-01 The scientific community has voiced two general concerns about the future of the earth. Firstly, climatologists and oceanographers have focused on the changes in our physical environment, ie climate, oceans, and air. And secondly, environmental biologists have addressed issues of conservation and the extinction of species. There is increasing evidence that these two broad concerns are intertwined and mutually dependent. Past changes in biodiversity have both responded to and caused changes in the earth's environment. In its discussions of ten key terrestrial biomes and freshwater ecosystems, this volume uses our broad understanding of global environmental change to present the first comprehensive scenarios of biodiversity for the twenty-first century. Combining physical earth science with conservation biology, the book provides a starting-point for regional assessments on all scales. The book will be of interest to those concerned with guiding research on the changing environment of the earth and with planning future policy, especially in accordance with the Global Biodiversity Convention.

Temperate and Boreal Rainforests of the World Dominick A. DellaSala 2011 Temperate rainforests are biogeographically unique. Compared to their tropical counterparts, temperate rainforests are rarer and are found disproportionately along coastlines. Because most temperate rainforests are marked by the intersection of marine, terrestrial, and freshwater systems, these rich ecotones are among the most productive regions on Earth. Globally, temperate rainforests store vast amounts of carbon, provide habitat for scores of rare and endemic species with ancient affinities, and sustain complex food-web dynamics. In spite of their global significance, however, protection levels for these ecosystems are far too low to sustain temperate rainforests under a rapidly changing global climate and ever expanding human footprint. Therefore, a global synthesis is needed to provide the latest ecological science and call attention to the conservation needs of temperate and boreal rainforests. A concerted effort to internationalize the plight of the world's temperate and boreal rainforests is underway around the globe; this book offers an essential (and heretofore missing) tool for that effort. DellaSala and his contributors tell a compelling story of the importance of temperate and boreal rainforests that includes some surprises (e.g., South Africa, Iran, Turkey, Japan, Russia). This volume provides a comprehensive reference from which to build a collective vision of their future.

Forest Dynamics and Conservation Manoj Kumar 2022-05-16 This book unveils forestry science and its policy and management that connect past and present understanding of forests. The aggregated knowledge is presented to cover the approaches adopted in studying forest structure, its growth, functioning, and degradation, especially in the context of the surrounding environment. The application of advanced computation, instrumentation, and modelling has been elaborated in various chapters. Forest ecosystems are rapidly changing due to forest fires, deforestation, urbanization, climate change, and other natural and anthropogenic drivers. Understanding the dynamics of forest ecosystems requires contemporary methods and measures, utilizing modern tools and big data for developing effective conservation plans. The book also covers discussion on policies for sustainable forestry, agroforestry, environmental governance,

socio-ecology, nature-based solutions, and management implications. It is suitable for a wide range of readers working in the field of scientific forestry, policy making, and forest management. In addition, it is a useful material for postgraduate and research students of forestry sciences.

Terrestrial Ecoregions of North America Taylor H. Ricketts 1999 This book presents the rationale for the ecoregion approach, describes the biological distinctiveness of each North American ecoregion in detail, assesses the level of threats facing each, presents a conservation agenda for the next decade, and sets the recommendations for preserving and restoring biodiversity. In addition, a series of full-color maps present essential information about the ecoregions and the biodiversity they contain.

Rainforest Tony Juniper 2019-09-19 Rainforests have long been recognized as hotspots of biodiversity--but they are crucial for our planet in other surprising ways. Not only do these fascinating ecosystems thrive in rainy regions, they create rain themselves, and this moisture is spread around the globe. Rainforests across the world have a powerful and concrete impact, reaching as far as America's Great Plains and central Europe. In *Rainforest: Dispatches from Earth's Most Vital Frontlines*, a prominent conservationist provides a comprehensive view of the crucial roles rainforests serve, the state of the world's rainforests today, and the inspirational efforts underway to save them. In *Rainforest*, Tony Juniper draws upon decades of work in rainforest conservation. He brings readers along on his journeys, from the thriving forests of Costa Rica to Indonesia, where palm oil plantations have supplanted much of the former rainforest. Despite many ominous trends, Juniper sees hope for rainforests and those who rely upon them, thanks to developments like new international agreements, corporate deforestation policies, and movements from local and Indigenous communities. As climate change intensifies, we have already begun to see the effects of rainforest destruction on the planet at large. *Rainforest* provides a detailed and wide-ranging look at the health and future of these vital ecosystems. Throughout this evocative book, Juniper argues that in saving rainforests, we save ourselves, too.

Tropical Forests and the Human Spirit Roger D. Stone 2002-01-17 Tropical forests are vanishing at an alarming rate. This book, based on extensive international field research, highlights one solution for preserving this precious resource: empowering local people who depend on the forest for survival. Synthesizing a vast amount of information that has never been brought together in one place, Roger D. Stone and Claudia D'Andrea provide a clearly written and energizing tour of global efforts to empower community-based forest stewards. Along the way, they show the fundamental importance of tropical forest ecosystems and deepen our sense of urgency to save them for the benefit of billions of rural people in tropical and subtropical regions as well as for countless species of plants and animals. In their travels to research this book, the authors saw many remarkable examples of how proficient even the poorest local people can be in stabilizing and recovering formerly destitute forests. With engagingly written case studies from Thailand's Golden Triangle to Mindanao in the Philippines, from Indonesia, India, and Africa to Brazil, Mexico, and Central America, they introduce us to the communities and the individuals, the governments, the loggers, the agencies, and the local groups who vie for forest resources. Contrasting community-based efforts and traditional forest management with government and donor efforts, they discuss the many reasons why international institutions and national governments have been unable and unwilling to stem the accelerating loss of tropical forestland. This book argues we are paying a terrible price--politically, economically, and environmentally--for allowing tropical forests to be stripped. Community-based forestry is no panacea, but this book clearly shows its effectiveness as a management technique.

Trees & Forests, A Colour Guide Bryan G. Bowes 2010-01-15 Trees are one of the dominant features of our existence on earth and play a fundamental role in the environment. This book gives the reader an overview and understanding of trees. Subject areas covered include ecology and conservation, tree anatomy and evolution, pathology, silviculture, propagation, and surgery. The different chapters cover trees from various world habitats, from northern boreal and montane coniferous forests to tropical and subtropical rainforests. The book is fully illustrated throughout

with the highest quality color photos and is invaluable to professionals and students in plant science, plant biology, ecology, and conservation and to those working in forestry and arboriculture.

Let's Save Our Planet: Forests Jess French 2020-10-06 This book is printed on responsibly sourced, 100% recycled FSC paper and using soy inks. Do you want to make a difference and help change the world? If the answer's yes then this book is for you! Turn the pages and discover everything you need to know about deforestation and the ways we can tackle it. From scientists and conservationists helping to protect forest creatures, to tech inventions like robot tree-planters, this book helps children aged 8 and up to discover the incredible solutions to deforestation that are being worked on around the world right now. Readers can begin by exploring different forest types around the world, discovering what makes each of them precious and unique, before taking a look at the causes, effects and solutions to deforestation. The final section explores what readers can do to help. Filled with guides, tips and lessons in how to use your voice and change your habits, these pages help readers learn how they can make a difference. Engaging text by Dr Jess French, presenter of Minibeast Adventure with Jess on CBeebies, with stunning artwork by Alexander Mostov, illustrator of D-Day: Untold Stories of the Normandy Landings Inspired by 20 Real-Life People.

Why Forests? Why Now? Frances Seymour 2016-12-27 Tropical forests are an undervalued asset in meeting the greatest global challenges of our time—averting climate change and promoting development. Despite their importance, tropical forests and their ecosystems are being destroyed at a high and even increasing rate in most forest-rich countries. The good news is that the science, economics, and politics are aligned to support a major international effort over the next five years to reverse tropical deforestation. *Why Forests? Why Now?* synthesizes the latest evidence on the importance of tropical forests in a way that is accessible to anyone interested in climate change and development and to readers already familiar with the problem of deforestation. It makes the case to decisionmakers in rich countries that rewarding developing countries for protecting their forests is urgent, affordable, and achievable.

Disturbance Ecology and Biological Diversity Erik A. Beever 2019-10-30 This book presents cascading effects of ecological disturbances on a multitude of ecosystem components. It includes agricultural development, large infrequent disturbances, forest harvesting, non-native grazing in deserts, ground transportation, powerline corridors, fires, urban ecology, disturbance in aquatic ecosystems, land-use dynamics on diversity, habitat fragmentation, sedimentation of wetlands, and contemporary climate change. The book facilitates users in understanding why disturbances are occurring while recommending mitigation and remediation strategies.

Routledge Handbook of Forest Ecology Kelvin S.-H. Peh 2015-10-16 This comprehensive handbook provides a unique resource covering all aspects of forest ecology from a global perspective. It covers both natural and managed forests, from boreal, temperate, sub-tropical and tropical regions of the world. The book is divided into seven parts, addressing the following themes: forest types forest dynamics forest flora and fauna energy and nutrients forest conservation and management forests and climate change human impacts on forest ecology. While each chapter can stand alone as a suitable resource for a lecture or seminar, the complete book provides an essential reference text for a wide range of students of ecology, environmental science, forestry, geography and natural resource management. Contributors include leading authorities from all parts of the world.

The Seven Wonders of Washington State Howard Frisk 2015-06-20 Washington State has some of the most spectacular scenery in the world, and among that spectacular scenery are seven very special places. Freelance photographer and Washington State native Howard Frisk has put together a simple guidebook that focuses on just those seven places. Each one is presented with beautiful full color photographs, and a description of what makes it amazing along with interesting and useful tidbits of information. The Seven Wonders of Washington State are meant to be experienced first hand, and his guide can show you where, when and how to experience

them yourself. The Seven Wonders of Washington are: Mt Rainier Mt St Helens The Columbia River Gorge Palouse The Hoh Rain Forest Long Beach The Channeled Scablands

Concepts of Biology Samantha Fowler 2018-01-07 *Concepts of Biology* is designed for the single-semester introduction to biology course for non-science majors, which for many students is their only college-level science course. As such, this course represents an important opportunity for students to develop the necessary knowledge, tools, and skills to make informed decisions as they continue with their lives. Rather than being mired down with facts and vocabulary, the typical non-science major student needs information presented in a way that is easy to read and understand. Even more importantly, the content should be meaningful. Students do much better when they understand why biology is relevant to their everyday lives. For these reasons, *Concepts of Biology* is grounded on an evolutionary basis and includes exciting features that highlight careers in the biological sciences and everyday applications of the concepts at hand. We also strive to show the interconnectedness of topics within this extremely broad discipline. In order to meet the needs of today's instructors and students, we maintain the overall organization and coverage found in most syllabi for this course. A strength of *Concepts of Biology* is that instructors can customize the book, adapting it to the approach that works best in their classroom. *Concepts of Biology* also includes an innovative art program that incorporates critical thinking and clicker questions to help students understand--and apply--key concepts.

The State of the World's Forests 2020 Food and Agriculture Organization of the United Nations 2020-05-01 As the United Nations Decade on Biodiversity 2011–2020 comes to a close and countries prepare to adopt a post-2020 global biodiversity framework, this edition of *The State of the World's Forests (SOFO)* examines the contributions of forests, and of the people who use and manage them, to the conservation and sustainable use of biodiversity. Forests cover just over 30 percent of the global land area, yet they provide habitat for the vast majority of the terrestrial plant and animal species known to science. Unfortunately, forests and the biodiversity they contain continue to be under threat from actions to convert the land to agriculture or unsustainable levels of exploitation, much of it illegal. *The State of the World's Forests 2020* assesses progress to date in meeting global targets and goals related to forest biodiversity and examines the effectiveness of policies, actions and approaches, in terms of both conservation and sustainable development outcomes. A series of case studies provide examples of innovative practices that combine conservation and sustainable use of forest biodiversity to create balanced solutions for both people and the planet.

Know Soil, Know Life David L. Lindbo 2012-01-01 Aflatoxin contamination represents a serious threat to a healthy food supply. Resulting from mold on corn, peanuts, and other grains and grain products, aflatoxins are extremely toxic. Understanding the nature of fungi infection and the factors that favor aflatoxin formation is important to grain producers, dealers, and other professionals who control grain from the field to the site of consumption to prevent serious loss of large quantities of grain or grain products. Producers of poultry, cattle, sheep, pigs, and even pet food need to be aware of the threat of aflatoxin. Participants in the grain industry who grow, store, or process corn and other grains subject to potential infection by aflatoxin should be aware of the risks of fungal infection and aflatoxin contamination, and proper management strategies. The authors focus on the binding of aflatoxin in animal feeds by employing calcium smectite. Readers will be especially glad to know that aflatoxin can often be controlled with a natural mineral material to bind aflatoxin in animal feeds at a modest cost.--Back cover.

Ecology and the Environment Russell K. Monson 2014-10-02 In this book, plant biology is considered from the perspective of plants and their surrounding environment, including both biotic and abiotic interactions. The intended audience is undergraduate students in the middle or final phases of their programs of study. Topics are developed to provide a rudimentary understanding of how plant-environment interactions span multiple spatiotemporal scales, and how this rudimentary knowledge can be applied to understand the causes of ecosystem vulnerabilities in the face of global climate change and expansion of natural resource use by

human societies. In all chapters connections are made from smaller to larger scales of ecological organization, providing a foundation for understanding plant ecology. Where relevant, environmental threats to ecological systems are identified and future research needs are discussed. As future generations take on the responsibility for managing ecosystem goods and services, one of the most effective resources that can be passed on is accumulated knowledge of how organisms, populations, species, communities and ecosystems function and interact across scales of organization. This book is intended to provide some of that knowledge, and hopefully provide those generations with the ability to avoid some of the catastrophic environmental mistakes that prior generations have made.

Forest Canopies Margaret Lowman 2004 The treetops of the world's forests are where discovery and opportunity abound, however they have been relatively inaccessible until recently. This book represents an authoritative synthesis of data, anecdotes, case studies, observations, and recommendations from researchers and educators who have risked life and limb in their advocacy of the High Frontier. With innovative rope techniques, cranes, walkways, dirigibles, and towers, they finally gained access to the rich biodiversity that lives far above the forest floor and the emerging science of canopy ecology. In this new edition of *Forest Canopies*, nearly 60 scientists and educators from around the world look at the biodiversity, ecology, evolution, and conservation of forest canopy ecosystems. -Comprehensive literature list -State-of-the-art results and data sets from current field work -Foremost scientists in the field of canopy ecology - Expanded collaboration of researchers and international projects -User-friendly format with sidebars and case studies -Keywords and outlines for each chapter

Conservation Biology for All Navjot S. Sodhi 2010-01-08 *Conservation Biology for All* provides cutting-edge but basic conservation science to a global readership. A series of authoritative chapters have been written by the top names in conservation biology with the principal aim of disseminating cutting-edge conservation knowledge as widely as possible. Important topics such as balancing conservation and human needs, climate change, conservation planning, designing and analyzing conservation research, ecosystem services, endangered species management, extinctions, fire, habitat loss, and invasive species are covered. Numerous textboxes describing additional relevant material or case studies are also included. The global biodiversity crisis is now unstoppable; what can be saved in the developing world will require an educated constituency in both the developing and developed world. Habitat loss is particularly acute in developing countries, which is of special concern because it tends to be these locations where the greatest species diversity and richest centres of endemism are to be found. Sadly, developing world conservation scientists have found it difficult to access an authoritative textbook, which is particularly ironic since it is these countries where the potential benefits of knowledge application are greatest. There is now an urgent need to educate the next generation of scientists in developing countries, so that they are in a better position to protect their natural resources.

Forests Jaboury Ghazoul 2015 Since the dawn of human civilization, forests have provided us with food, resources, and energy. The history of human development is also one of forest loss and transformation, and yet even in our increasingly urbanized societies we remain surprisingly dependent on forests for a wide range of goods and services. Moreover, forests still retain a remarkable hold on our environmental values. In an era of continuing tropical deforestation and temperate forest resurgence, and in the midst of uncertainties of climate and land use changes, it is more important than ever to understand what forests are, how they contribute to our livelihoods, and how they underpin our cultural histories and futures. In this *Very Short Introduction* Jaboury Ghazoul explores our contrasting interactions with forests, as well as their origins, dynamics, and the range of goods and services they provide to human society. Ghazoul concludes with an examination of the recent history of deforestation, transitions to reforestation, and the future outlook for forests particularly in the context of expected climate change. ABOUT THE SERIES: The *Very Short Introductions* series from Oxford University Press contains hundreds of titles in almost every subject area. These pocket-sized books are the perfect way to get ahead

in a new subject quickly. Our expert authors combine facts, analysis, perspective, new ideas, and enthusiasm to make interesting and challenging topics highly readable.

The Fungal Community John Dighton 2017-03-16 "...a number of chapters provide excellent summaries of the modern methods available for studying fungal ecology, along with those more traditional methods that are still extremely valuable...overall it is a hugely valuable compendium of fungal ecology research. It is a must for the library shelf." -Lynne Boddy, Cardiff University, UK, *Mycological Research*, 2006 "These 44 chapters are an excellent starting point for anyone interested in fungal communities, in the broadest sense of the term. It is a book for dipping into...may be the last comprehensive treatment of fungal communities before the molecular revolution." -Meriel Jones, University of Liverpool, UK, *Microbiology Today* "... the scope of the work is tremendous. ... Excellent chapters providing overviews of methods ... provide a snap shot of the current approaches used to understand fungal communities at several levels of organization. This book should probably be on the shelf of every student of mycology, and many ecologists too. For all students, this book should be a valuable resource and source of inspiration." -Daniel Henk, Imperial College Faculty of Medicine, London, in *Inoculum*, Vol. 59, No. 3, May 2008 "Thorough taxonomic and subject indices further aid the reader in navigating through multiple authors' treatments of subjects of interest." - Anthony Amend, Department of Botany, University of Hawaii at Manoa in *Economic Botany*, V. 61 In all subjects in science, new findings and the use of new technologies allow us to develop an ever-greater understanding of our world. Expanded and updated coverage in the fourth edition includes: Adds new sections on Integrating Genomics and Metagenomics into Community Analysis, Recent Advances in Fungal Endophyte Research, Fungi in the Built Environment, and Fungal Signaling and Communication Includes a broader treatment of fungal communities in natural ecosystems with in-depth coverage of fungal adaptations to stress and conservation Expands coverage of the influence of climate change on fungi and the role of fungi in organically polluted ecosystems Includes contributions from scientists from 20 nations to illustrate a true global approach for bridging gaps between ecological concepts and mycology

Encyclopedia of the Anthropocene 2017-11-27 *Encyclopedia of the Anthropocene* presents a currency-based, global synthesis cataloguing the impact of humanity's global ecological footprint. Covering a multitude of aspects related to Climate Change, Biodiversity, Contaminants, Geological, Energy and Ethics, leading scientists provide foundational essays that enable researchers to define and scrutinize information, ideas, relationships, meanings and ideas within the Anthropocene concept. Questions widely debated among scientists, humanists, conservationists, politicians and others are included, providing discussion on when the Anthropocene began, what to call it, whether it should be considered an official geological epoch, whether it can be contained in time, and how it will affect future generations. Although the idea that humanity has driven the planet into a new geological epoch has been around since the dawn of the 20th century, the term 'Anthropocene' was only first used by ecologist Eugene Stoermer in the 1980s, and hence popularized in its current meaning by atmospheric chemist Paul Crutzen in 2000. Presents comprehensive and systematic coverage of topics related to the Anthropocene, with a focus on the Geosciences and Environmental science Includes point-counterpoint articles debating key aspects of the Anthropocene, giving users an even-handed navigation of this complex area Provides historic, seminal papers and essays from leading scientists and philosophers who demonstrate changes in the Anthropocene concept over time

Comparative Plant Succession Among Terrestrial Biomes of the World Karel Prach 2020-03-31 Provides a comparative approach to plant succession among all terrestrial biomes and disturbances, helping to reveal generalizable patterns.

Encyclopedia of the World's Biomes 2020-06-26 *Encyclopedia of the World's Biomes* is a unique, five volume reference that provides a global synthesis of biomes, including the latest science. All of the book's chapters follow a common thematic order that spans biodiversity importance, principal anthropogenic stressors and trends, changing climatic conditions, and conservation

strategies for maintaining biomes in an increasingly human-dominated world. This work is a one-stop shop that gives users access to up-to-date, informative articles that go deeper in content than any currently available publication. Offers students and researchers a one-stop shop for information currently only available in scattered or non-technical sources Authored and edited by top scientists in the field Concisely written to guide the reader though the topic Includes meaningful illustrations and suggests further reading for those needing more specific information

Cultural Forests of the Amazon William L. Balée 2013-08-20 Winner of the Society for Economic Botany's Mary W. Klinger Book Award. Cultural Forests of the Amazon is a comprehensive and diverse account of how indigenous people transformed landscapes and managed resources in the most extensive region of tropical forests in the world. Until recently, most scholars and scientists, as well as the general public, thought indigenous people had a minimal impact on Amazon forests, once considered to be total wildernesses. William Balée's research, conducted over a span of three decades, shows a more complicated truth. In Cultural Forests of the Amazon, he argues that indigenous people, past and present, have time and time again profoundly transformed nature into culture. Moreover, they have done so using their traditional knowledge and technology developed over thousands of years. Balée demonstrates the inestimable value of indigenous knowledge in providing guideposts for a potentially less destructive future for environments and biota in the Amazon. He shows that we can no longer think about species and landscape diversity in any tropical forest without taking into account the intricacies of human history and the impact of all forms of knowledge and technology. Balée describes the development of his historical ecology approach in Amazonia, along with important material on little-known forest dwellers and their habitats, current thinking in Amazonian historical ecology, and a narrative of his own dialogue with the Amazon and its people.

British Columbia's Inland Rainforest Susan Stevenson 2011 The vast temperate rainforests of coastal British Columbia are world renowned, but much less is known about the other rainforest located 500 kilometres inland along the western slopes of the interior mountains. The unique integration of continentality and humidity in this region favours the development of lush rainforest communities that incorporate both coastal and boreal elements. In British Columbia's Inland Rainforest, scientists bring together, for the first time, a broad spectrum of information about this distinctive ecosystem. They also consider the ecological consequences of human activities in the rainforest and present strategies for its management and conservation.

Seed Fate J. E. Lambert 2004-12-20 This book presents current knowledge of seed fate in both natural and human-disturbed landscapes, from various regions of the world. Habitats considered range from mountain and arid deserts in the temperate zone, to savanna and lowland rainforests in tropical regions of the world. Particular attention is paid to plant diversity conservation when seed removal is affected by factors such as hunting, habitat fragmentation or intensive logging. Contributors include leading scientists involved in research on seed ecology and on animal-plant relationships from the perspective of both primary and secondary seed dispersal, and predation.

High-Latitude Rainforests and Associated Ecosystems of the West Coast of the Americas Richard G. Lawford 1996 Regional intercomparisons between ecosystems on different continents can be a powerful tool to better understand the ways in which ecosystems respond to global change. Large areas are often needed to characterize the causal mechanisms governing interactions between ecozones and their environments. Factors such as weather and climate patterns, land-ocean and land-atmosphere interactions all play important roles. As a result of the strong physical north-south symmetry between the western coasts of North and South America, the similarities in climate, coastal oceanography and physiography between these two regions have been

extensively documented. High Latitude Rain Forests and Associated Ecosystems of the West Coast of the Americas presents current research on West Coast forest and river ecology, and compares ecosystems of the Pacific Northwest with those of South America.

Dendroecology Mariano M. Amoroso 2017-12-12 Dendroecologists apply the principles and methods of tree-ring science to address ecological questions and resolve problems related to global environmental change. In this fast-growing field, tree rings are used to investigate forest development and succession, disturbance regimes, ecotone and treeline dynamics and forest decline. This book of global scope highlights state-of-the-science dendroecological contributions to paradigm-shifts in our understanding of ecophysiology, stand dynamics, disturbance interactions, forest decline and ecosystem resilience to global environmental change and is fundamental to better managing our forested ecosystems for the full range of ecosystem goods and services that they provide.

Biomes of Earth Susan L. Woodward 2003 This handy one-volume resource explores all of Earth's major biomes--both natural and human-created--and their characteristic plants and animals.

Palynology and Vegetation History Valentí Rull 2019-01-11 This Research Topic commemorates the centenary of the first quantitative pollen diagram by Lennart von Post, the founder of paleoecological palynology. The main aim is to provide a thorough view of the use of palynology in aspects such as the reconstruction of Quaternary vegetation and environmental changes, the role of natural and anthropogenic drivers in the development of the Quaternary vegetation, the shaping of present-day ecological and biogeographical patterns, the potential application of this knowledge in biodiversity conservation and landscape restoration and the development of new methods of pollen analysis and data management. The Research Topic is subdivided into four main conceptual parts, namely (1) modern analog studies; (2) land cover estimates from pollen data; (3) vegetation dynamics reconstructions from Europe, North and South America, Africa and Oceania; and (4) large-scale reviews and meta-analyses. Hopefully, this Research Topic will serve to appraise the state of the art of modern palynology and highlight the usefulness of this discipline in long-term ecological research.

Global Forest Fragmentation Chris J Kettle 2014-09-12 Forest fragmentation will inevitably continue over the coming years, especially in developing economies. This book provides a cutting edge review of the multi-disciplinary sciences related to studies of global forest fragmentation. It specifically addresses cross-cutting themes from both an ecological and a social sciences perspective. The ultimate goal of Global Forest Fragmentation is to provide a detailed scientific base to support future forest landscape management and planning to meet global environmental and societal needs.

The Ecological Importance of Mixed-Severity Fires Dominick A DellaSala 2015-06-08 The Ecological Importance of High-Severity Fires, presents information on the current paradigm shift in the way people think about wildfire and ecosystems. While much of the current forest management in fire-adapted ecosystems, especially forests, is focused on fire prevention and suppression, little has been reported on the ecological role of fire, and nothing has been presented on the importance of high-severity fire with regards to the maintenance of native biodiversity and fire-dependent ecosystems and species. This text fills that void, providing a comprehensive reference for documenting and synthesizing fire's ecological role. Offers the first reference written on mixed- and high-severity fires and their relevance for biodiversity Contains a broad synthesis of the ecology of mixed- and high-severity fires covering such topics as vegetation, birds, mammals, insects, aquatics, and management actions Explores the conservation vs. public controversy issues around megafires in a rapidly warming world