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Principles Of Conservation Biology

Conservation Biology What is Conservation Biology General Biology Chapter 38 Basics Conservation Biology Conservation Biology: Introduction Introduction to Conservation Biology Conservation Biology History of Conservation Biology Introduction to Conservation Biology Conservation Biology Intro Principles for Conservation The Why What and How of Conservation Biology Biodiversity and Conservation US Conservation Biology History: 1891 to Now Conservation Biology - Intro | BIALIGY.com Conservation Biology Sand County Almanac (clip) WHAT IS CONSERVATION BIOLOGY? | Alex Conservation Biology Bio 122 Conservation Biology Chapter 1: Intro to Conservation Biology BITC / Conservation - Conservation Science

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For the Coming Decade University of Chicago Press
In the new edition of this highly successful book, Malcolm Hunter and new co-author James Gibbs offer a thorough introduction to the fascinating and important field of conservation biology, focusing on what can be done to maintain biodiversity through management of ecosystems and populations. Starting with a succinct look at conservation and biodiversity, this book progresses to contend with some of the subject's most complex topics, such as mass extinctions, ecosystem degradation, and over exploitation. Discusses social, political, and economic aspects of conservation biology. Thoroughly revised with over six hundred new references and web links to many of the organizations involved in conservation biology, striking photographs and maps. Artwork from the book is available to instructors online at www.blackwellpublishing.com/hunter and by request on CD-ROM.
Applying Ecological Principles to Land Management Springer Science & Business Media
Broad-scale conservation of habitats is increasingly being recognized as a more effective means of protecting species and landscapes than single-species preservation efforts. While interest in the approach has grown tremendously in recent years, it remains controversial and the science behind it has yet to be fully developed.In The Science of Conservation Planning, three of the nation's leading conservation biologists explore the role of the scientist in the planning process and present a framework and guidelines for applying science to regional habitat-based conservation planning. Chapters consider: history and background of conservation planning efforts criticisms of science in conservation planning principles of conservation biology that apply to conservation planning detailed examination of conservation plans specific recommendations for all parties involved.The recommendations, interpretations, and questions provided are thoroughly based in the science of conservation biology, and the framework presented is adaptable to allow for revision and improvement as knowledge is gained and theories refined. The Science of Conservation Planning will serve as a model for the application of conservation biology to real-life problems, and can lead to the development of scientifically and politically sound plans that are likely to achieve their conservation goals, even in cases where biological and ecological information is limited.The book is essential for scientists at all levels, including agency biologists, academic scientists, environmental consultants, and scientists employed by industry and conservation groups. It is also a valuable resource for elected officials and their staffs, environmentalists, developers, students, and citizen activists involved with the complex and contentious arena of conservation planning.
Research, Management and Policy Island Press
This edited volume will provide a treatment of evolutionary conservation biology that introduces and explains major concepts and also unifies recent theoretical and empirical advances.
Conservation Biology And Public Policy John Wiley & Sons
A volume of essays describing lab and field experiments that improve our understanding or ability to resolve issues surrounding endangered species and invasive plants and animals.
Essentials of Conservation Biology Elsevier
The earth's biodiversity currently faces an extinction crisis that is unprecedented. Conservationists attempt to intervene in the extinction process either locally by protecting or restoring important species and habitats, or at national and international levels by influencing key policies and promoting debate. Reliable information is the foundation upon which these efforts are based, which places research at the heart of biodiversity conservation. The role of research in such conservation is diverse. It includes understanding why biodiversity is important, defining 'units' of biodiversity, priority-setting for species and sites, managing

endangered and declining populations, understanding large-scale processes, making predictions about the future and interfacing with training, education, public awareness and policy initiatives. Using examples from a wide range of bird conservation work worldwide, researchers consider the principles underlying these issues, and illustrate how these principles have been applied to address actual conservation problems for students, practitioners and researchers in conservation biology./ñ¿F.

Extinction in Our Times Cambridge University Press

Following the much acclaimed success of the first volume ofKey Topics in Conservation Biology, this entirely new secondvolume addresses an innovative array of key topics in contemporaryconservation biology. Written by an internationally renownedteam of authors, Key Topics in Conservation Biology 2 addsto the still topical foundations laid in the first volume(published in 2007) by exploring a further 25 cutting-edge issuesin modern biodiversity conservation, including controversialsubjects such as setting conservation priorities, balancing thefocus on species and ecosystems, and financial mechanisms to valuebiodiversity and pay for its conservation. Other chapters, settingthe framework for conservation, address the sociology andphilosophy of peoples' relation with Nature and its impact onhealth, and such challenging practical issues as wildlife trade andconflict between people and carnivores. As a new development, thissecond volume of Key Topics includes chapters on major ecosystems,such as forests, islands and both fresh and marine waters, alongwith case studies of the conservation of major taxa: plants,butterflies, birds and mammals. A further selection of topicsconsider how to safeguard the future through monitoring, reserveplanning, corridors and connectivity, together with approaches toreintroduction and re-wilding, along with managing wildlifedisease. A final chapter, by the editors, synthesises thinking onthe relationship between biodiversity conservation and humandevelopment. Each topic is explored by a team of top international experts,assembled to bring their own cross-cutting knowledge to apenetrating synthesis of the issues from both theoretical andpractical perspectives. The interdisciplinary nature of biodiversity conservation isreflected throughout the book. Each essay examines the fundamentalprinciples of the topic, the methodologies involved and, crucially,the human dimension. In this way, Key Topics in ConservationBiology 2, like its sister volume, Key Topics in ConservationBiology, embraces issues from cutting-edge ecological scienceto policy, environmental economics, governance, ethics, and thepractical issues of implementation. Key Topics in Conservation Biology 2 will, like itssister volume, be a valuable resource in universities and colleges,government departments, and conservation agencies. It is aimedparticularly at senior undergraduate and graduate students inconservation biology and wildlife management and wider ecologicaland environmental subjects, and those taking Masters degrees in anyfield relevant to conservation and the environment. Conservationpractitioners, policy-makers, and the wider general public eager tounderstand more about important environmental issues will also findthis book invaluable.

Applying Landscape Ecology in Biological Conservation John Wiley & Sons

Meeting today's environmental challenges requires a new way of thinking about the intricate dependencies between humans and nature. Ecology and Ecosystem Conservation provides students and other readers with a basic understanding of the fundamental principles of ecological science and their applications, offering an essential overview of the way ecology can be used to devise strategies to conserve the health and functioning of ecosystems. The book begins by exploring the need for ecological science in understanding current environmental issues and briefly discussing what ecology is and isn't. Subsequent chapters address critical issues in conservation and show how ecological science can be applied to them. The book explores questions such as: • What is the role of ecological science in decision making? • What factors govern the assembly of ecosystems and determine their response to various stressors? • How does Earth's climate system function and determine the distribution of life on Earth? • What factors control the size of populations? • How does fragmentation of the landscape affect the persistence of species on the landscape? • How does biological diversity influence ecosystem processes? The book closes with a final chapter that addresses the need not only to understand ecological science, but to put that science into an ecosystem conservation ethics perspective.

Conservation Biology Principles for Forested Landscapes Princeton University Press

Practical Conservation Biology covers the complete array of topics that are central to conservation biology and natural resource management, thus providing the essential framework for under-graduate and post-graduate courses in these subject areas. Written by two of the world's leading environment experts, it is a "must have" reference for environment professionals in government, non-government and industry sectors. The book reflects the latest thinking on key topics such as extinction risks, losses of genetic variability, threatening processes, fire effects, landscape fragmentation, habitat loss and vegetation clearing, reserve design, sustainable harvesting of natural populations, population viability analysis, risk assessment, conservation biology policy, human population growth and its impacts on biodiversity. Practical Conservation Biology deals primarily with the Australian context but also includes many overseas case studies. The book is the most comprehensive assessment of conservation topics in Australia and one of the most comprehensive worldwide.

Evolution in Action

Open Book Publishers

Principles of Conservation Biology, Third Edition is a complete revision of the most comprehensive textbook on conservation biology. Written by leading experts in the field, it is intended for use in conservation biology courses at the advanced undergraduate and graduate levels, as well as by researchers and practitioners. It assumes a basic background in biology and ecology. The text introduces the major themes and concepts of the diverse and dynamic field of conservation biology. The biological and social underpinnings of conservation problems and potential solutions are interwoven throughout the text, which is divided into 4 sections: foundations of the field, threats to biodiversity, contexts for conservation, and practical applications of conservation biology in a real and complex world. Guest essays and case studies provide a diversity of perspectives and real-world examples that add insight and provoke discussion. The Third Edition features a wholly revised organization, emphasising both analyses of different categories of threat and approaches to conservation. Coverage has been expanded to emphasise both terrestrial and marine conservation issues, and efforts in the US and across the globe. The book is richly illustrated, and concludes with an extensive glossary of useful terms and a large bibliography that has proved a valuable reference for students and researchers.

Conservation Biology

Island Press

Reflecting the very latest research, this book provides an in-

depth review of the role of resilience in the management of social-ecological systems and the ecosystem services they provide. Leaders in the field outline seven principles for building resilience in social-ecological systems, examining how these can be applied to advance sustainability.

Conserving Bird Biodiversity Oxford University Press

The loss of the earth's biological diversity is widely recognized as a critical environmental problem. That loss is most severe in developing countries, where the conditions of human existence are most difficult. Conserving Biodiversity presents an agenda for research that can provide information to formulate policy and design conservation programs in the Third World. The book includes discussions of research needs in the biological sciences as well as economics and anthropology, areas of critical importance to conservation and sustainable development. Although specifically directed toward development agencies, non-governmental organizations, and decisionmakers in developing nations, this volume should be of interest to all who are involved in the conservation of biological diversity.

Life on Earth: A-G

Cambridge University Press

Fred Van Dyke’s new textbook, Conservation Biology: Foundations, Concepts, Applications, 2nd Edition, represents a major new text for anyone interested in conservation. Drawing on his vast experience, Van Dyke’s organizational clarity and readable style make this book an invaluable resource for students in conservation around the globe. Presenting key information and well-selected examples, this student-friendly volume carefully integrates the science of conservation biology with its implications for ethics, law, policy and economics.

Fundamentals of Conservation Biology CSIRO PUBLISHING

This comprehenisive text approaches the subject from an ecological/evolutionary biological perspective. The assumption is that one cannot study forest insects without understanding the dynamics of the relationship between an insect and its host plant. This relationship includes knowing what factors control forest insect populations such as food, food quality, tree vigor, host selection, and symbiotic relationships. The authors also discuss tree-injuring insects from the perspective of their influence on tree physiology and growth as well as economic and commercial effects. The book represents a "modern" approach to the topic of forest and shade tree insects; is well-illustrated; and includes a comprehensive primary reference list.

Principles of Biology Springer Science & Business Media

The effective management of invasive alien species is clearly a priority for biological conservation worldwide. This book first provides strategies for managing such species at successive invasion stages, from prevention at the border to control of major infestations. It then describes the general tools and approaches that are recommended for successful management of particular groups of invasive organisms in a range of environments. In each case, the ecologicalbasis and practical requirements of invasive alien species management are addressed.

Foundations, Concepts, Applications Cambridge University Press

The Principles of Biology sequence (BI 211, 212 and 213) introduces biology as a scientific discipline for students planning to major in biology and other science disciplines. Laboratories and classroom activities introduce techniques used to study biological processes and provide opportunities for students to develop their ability to conduct research.

Conservation of Working Landscapes

Macmillan Science

Wild Forests presents a coherent review of the scientific and policy issues surrounding biological diversity in the context of contemporary public forest management. The authors examine past and current practices of forest management and provide a comprehensive overview of known and suspected threats to diversity. In addition to discussing general ecological principles, the authors evaluate specific approaches to forest management that have been proposed to ameliorate diversity losses. They present one such policy -- the Dominant Use Zoning Model incorporating an integrated network of "Diversity Maintenance Areas" -- and describe their attempts to persuade the U.S. Forest Service to adopt such a policy in Wisconsin. Drawing on experience in the field, in negotiations, and in court, the authors analyze the ways in which federal agencies are coping with the mandates of conservation biology and suggest reforms that could better address these important issues. Throughout, they argue that wild or unengineered conditions are those that are most likely to foster a return to the species richness that we once enjoyed.

Moving from Perspectives to Principles John Wiley & Sons

As conservationists, ranchers, and forest workers join together to protect the wide open spaces, diverse habitats, and working landscapes upon which people, plants, and animals depend, a new vision of management is emerging in which the conservation of biodiversity, ecosystem integrity, and sustainable resource use are seen not as antithetical, but as compatible, even symbiotic goals. This book explores that expanded, inclusive vision of environmentalism as it delves into the history and evolution of Western land use policy and of the working landscapes themselves.

Key Topics in Conservation Biology 2 Island Press

Conservation Biology in Sub-Saharan Africa comprehensively explores the challenges and potential solutions to key conservation issues in Sub-Saharan Africa. Easy to read, this lucid and accessible textbook includes fifteen chapters that cover a full range of conservation topics, including threats to biodiversity, environmental laws, and protected areas management, as well as related topics such as sustainability, poverty, and human-wildlife conflict. This rich resource also includes a background discussion of what conservation biology is, a wide range of theoretical approaches to the subject, and concrete examples of conservation practice in specific African contexts. Strategies are outlined to protect biodiversity whilst promoting economic development in the region. Boxes covering specific themes written by scientists who live and work throughout the region are included in each chapter, together with recommended readings and suggested discussion topics. Each chapter also includes an extensive bibliography. Conservation Biology in Sub-Saharan Africa provides the most up-to-date study in the field. It is an essential resource, available on-line without charge, for undergraduate and graduate students, as well as a handy guide for professionals working to stop the rapid loss of biodiversity in Sub-Saharan Africa and elsewhere.

Oxford University Press

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 conversion 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.

Practical Conservation Biology Univ of California Press

An innovative introduction to ecology and evolution This unique textbook introduces undergraduate students to quantitative models and methods in ecology, behavioral ecology, evolutionary biology, and conservation. It explores the core concepts shared by these related fields using tools and practical skills such as experimental design, generating phylogenies, basic statistical inference, and persuasive grant writing. And contributors use examples from their own cutting-edge research, providing diverse views to engage students and broaden their understanding. This is the only textbook on the subject featuring a collaborative "active learning" approach that emphasizes hands-on learning. Every chapter has exercises that enable students to work directly with the material at their own pace and in small groups. Each problem includes data presented in a rich array of formats, which students use to answer questions that illustrate patterns, principles, and methods. Topics range from Hardy-Weinberg equilibrium and population effective size to optimal foraging and indices of biodiversity. The book also includes a comprehensive glossary. In addition to the editors, the contributors are James Beck, Cawas Behram Engineer, John Gaskin, Luke Harmon, Jon Hess, Jason Kolbe, Kenneth H. Kozak, Robert J. Robertson, Emily Silverman, Beth Sparks-Jackson, and Anton Weisstein. Provides experience with hypothesis testing, experimental design, and scientific reasoning Covers core quantitative models and methods in ecology, behavioral ecology, evolutionary biology, and conservation Turns "discussion sections" into "thinking labs" Professors: A supplementary Instructor's Manual is available for this book. It is restricted to teachers using the text in courses. For information on how to obtain a copy, refer to: http://press.princeton.edu/class_use/solutions.html