Lizards Windows To The Evolution Of Diversity

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Amphibians and Reptiles of the Great Lakes Region, Revised Ed. - James H. Harding 2017-05-19
The revised edition of this well-loved guide is the essential reference for the identification of amphibians and reptiles in the Great Lakes region. Fully updated treatments of over 70 species feature detailed information on the distribution, habitat, behavior, and life history of these fascinating animals. This edition includes all new distribution maps as well as 90 additional color photographs showing close-ups of distinguishing features, common color phases, and different metamorphic stages. A thorough introduction provides a wealth of information on the evolution, natural history, classification, and conservation of these animals and examines changing Great Lakes ecosystems and their impact on herpetological diversity. Amphibians and Reptiles of the Great Lakes Region is a must-have resource for teachers, students, naturalists, professional biologists, and anyone else with an interest in this region’s ecology.
Reptiles and Amphibians - John P. Rafferty Associate Editor, Earth Sciences 2011-01-15
This volume details the physical characteristics, as well as the breeding and feeding behaviors, of both reptiles and amphibians, with a look at many of these remarkable creatures.
Reptile Ecology and Conservation - Dodd Jr. 2016-05-05
This practical handbook of reptile field ecology and conservation brings together a distinguished, international group of reptile researchers to provide a state-of-the-art review of the many new and exciting techniques used to study reptiles. The authors describe ecological sampling techniques and how they are implemented to monitor the conservation status and population trends of snakes, lizards, tuatara, turtles, and crocodilians throughout the world. Emphasis is

placed on the extent of statistical inference and the biases associated with different techniques and analyses. The chapters focus on the application of field research and data analysis for achieving an understanding of reptile life history, population dynamics, movement patterns, thermal ecology, conservation status, and the relationship between reptiles and their environment. The book emphasises the need for thorough planning, and demonstrates how a multi-dimensional approach incorporates information related to morphology, genetics, molecular biology, epidemiology, statistical modelling, animal welfare, and biosecurity. Although accentuating field sampling, sections on experimental applications in laboratories and zoos, thermal ecology, genetics, landscape ecology, disease and biosecurity, and management options are included. Much of this information is scattered in the scientific literature or not readily available, and the intention is to provide an affordable, comprehensive synthesis for use by graduate students, researchers, and practising conservationists worldwide.

Texas Lizards - Troy D. Hibbitts 2015-05-15

"Texas offers the opportunity to observe lizard diversity like no other part of the country," writes Laurie J. Vitt in the foreword to Texas Lizards. From the moist eastern Piney Woods to the western deserts, lizards can be found in every part of Texas. The state has forty-five native and six naturalized species of lizards, almost half of the 115 species that live in the continental United States. Yet Texas lizards have not received full coverage in regional field guides, and no other guide dedicated solely to the state's lizards has ever been published. Texas Lizards is a complete identification guide to all fifty-one native and established exotic lizard species. It offers detailed species accounts, range maps, and excellent color photographs (including regional, gender, and age variations for many species) to aid field identification. The authors, two of the state's most knowledgeable herpetologists, open the book with a broad overview of lizard natural history, conservation biology, observation, and captive maintenance before providing a key to Texas lizards and accounts of the various lizard families and species. Appendices list species of questionable occurrence in Texas and nonestablished exotic species. Informational resources on Texas lizards, a map of Texas counties, a glossary, a bibliography, and indexes of common and scientific names round out the volume.

Animal-Mediated Dispersal in Understudied Systems - Casper H. A. Van Leeuwen 2020-02-13

This eBook is a collection of articles from a Frontiers Research Topic. Frontiers Research Topics are very popular trademarks of the Frontiers Journals Series: they are collections of at least ten articles, all centered on a particular subject. With their unique mix of varied contributions from Original Research to Review Articles, Frontiers Research Topics unify the most influential researchers, the latest key findings and historical advances in a hot research area! Find out more on how to host your own Frontiers Research Topic or contribute to one as an author by contacting the Frontiers Editorial Office: frontiersin.org/about/contact.

Venomous Reptiles of the United States, Canada, and Northern Mexico - Carl H. Ernst 2011-06

The first volume contains species accounts of the venomous lizards and elapid and viperid snakes found

north of Mexico's twenty-fifth parallel. Volume two covers the twenty-one species of rattlesnakes found in the United States, Canada, and northern Mexico.

Sneed B. Collard III's Most Fun Book Ever About Lizards - Sneed B. Collard III 2012-02-01

Lizards are cool. Literally. They are ectotherms, which means they can?t make their own heat. That?s why you see many types of lizards basking in the sun, seemingly doing nothing at all. That?s the life. But make no mistake, lizards have very busy lives?looking for food and avoiding being food. Popular science writer Sneed B. Collard III gets down and dirty with all kinds of lizards?from your average "Joe Lizard," the western fence lizard, to the impressively large Komodo dragon. In a kid-friendly narrative, Sneed explores many different kinds of lizards, their habitats, defense systems, hunting techniques, and mating rituals. He reveals the exciting life of a lizard?from rappelling from the tops of trees to the forest floor, to dropping off a tail to get away from a predator.

Ecotoxicology of Amphibians and Reptiles, Second Edition - Donald W. Sparling 2010-06-02

Building on the success of its popular predecessor, the second edition of Ecotoxicology of Amphibians and Reptiles presents newly available findings on the species that are important environmental indicators. This new edition covers nearly twice as many topics as the first, including recent developments in the ecotoxicology of amphibians and reptiles, the current status of these animals, and intrinsic factors that affect their susceptibility to contaminants. The book also provides the latest information on specific groups of contaminants and their effects and body burdens in herpetafauna. After a review of how contaminants interact with other ecological factors, the text explores concerns for the future. New in the second edition: New research on the effects of pesticides, heavy metals, endocrine disrupting chemicals, and UVB Increased focus on the effects of contaminants rather than merely reporting residue information A synthesis of information on atrazine and its effects on gonads at low concentrations Coverage of the potentially alarming new cadre of chemicals that have recently or are about to come on the market for which there is very little or no information Important advances in surveying and monitoring One of the major factors behind the writing of the first edition was the worldwide phenomenon of declining amphibian populations. Although this decline has not abated, the breadth of research into its causes has expanded significantly. With chapter contributors carefully selected by the team of editors as leaders in their fields, this book provides an authoritative compendium of the most recent information on effects and residues coupled with a syntheses of what these numbers mean to science and policy.

Lizards - Eric R. Pianka 2003

This book provides an overview of the diversity of lizards and their major adaptive features. The authors discuss the latest research findings and provide new hypotheses about lizard diversity.

EVOLUTION - Michael Ruse 2009-01-01

Spanning evolutionary science from its inception to its latest findings, from discoveries and data to philosophy and history, this book is the most complete, authoritative, and inviting one-volume introduction to evolutionary biology available. Clear, informative, and comprehensive in scope, Evolution opens with a series of major essays dealing with the history and philosophy of

evolutionary biology, with major empirical and theoretical questions in the science, from speciation to adaptation, from paleontology to evolutionary development (evo devo), and concluding with essays on the social and political significance of evolutionary biology today. A second encyclopedic section travels the spectrum of topics in evolution with concise, informative, and accessible entries on individuals from Aristotle and Linneaus to Louis Leakey and Jean Lamarck; from T. H. Huxley and E. O. Wilson to Joseph Felsenstein and Motoo Kimura; and on subjects from altruism and amphibians to evolutionary psychology and Piltdown Man to the Scopes trial and social Darwinism. Readers will find the latest word on the history and philosophy of evolution, the nuances of the science itself, and the intricate interplay among evolutionary study, religion, philosophy, and society. Appearing at the beginning of the Darwin Year of 2009Ñthe 200th anniversary of the birth of Charles Darwin and the 150th anniversary of the publication of the Origin of SpeciesÑthis volume is a fitting tribute to the science Darwin set in motion.

Reptiles - Nicolae Sfetcu 2014-05-13

Today there are 6,800 reptile species on earth; the major groups are alligators and crocodiles, turtles, lizards, and snakes. Reptiles are tetrapods and amniotes, animals whose embryos are surrounded by an amniotic membrane. Today they are represented by four surviving orders: crocodilia (crocodiles, caimans and alligators), sphenodontia (tuataras from New Zealand, squamata (lizards, snakes and amphisbaenids - "worm-lizards"), and testudines (turtles).

Field Guide to Amphibians and Reptiles of California - Robert C. Stebbins 2012-09-04

“Since his first book on western amphibians in 1951, Stebbins has been recognized as the authoritative voice on this subject. This new book, written with McGinnis, continues that high standard of accuracy and usefulness. It is filled with entertaining anecdotes and user-friendly information. I recommend this to anyone getting their first introduction to the rich and diverse world of Californian herpetofauna.” -David Wake, Curator, Museum of Vertebrate Zoology, UC Berkeley “Dr. Robert Stebbins is the elder herpetological master of the American West, and this book has long been one of the finest state field guides to amphibians and reptiles. Now partnering to create a new, expanded edition with accomplished biologist Dr. Samuel McGinnis, a classic publication has become even better. Both the professional herpetologist and the weekend amateur naturalist will find this top-notch guide to be invaluable when exploring California's diverse landscapes.” -Alan St. John, author of Reptiles of the Northwest

Lizards in an Evolutionary Tree - Jonathan B. Losos 2011-02-09

"In a book both beautifully illustrated and deeply informative, Jonathan Losos, a leader in evolutionary ecology, celebrates and analyzes the diversity of the natural world that the fascinating anoline lizards epitomize. Readers who are drawn to nature by its beauty or its intellectual challenges—or both—will find his book rewarding."—Douglas J. Futuyma, State University of New York, Stony Brook "This book is destined to become a classic. It is scholarly, informative, stimulating, and highly readable, and will inspire a generation of students."—Peter R. Grant, author of How and Why Species Multiply: The Radiation of Darwin's Finches "Anoline lizards experienced a spectacular adaptive radiation in

the dynamic landscape of the Caribbean islands. The radiation has extended over a long period of time and has featured separate radiations on the larger islands. Losos, the leading active student of these lizards, presents an integrated and synthetic overview, summarizing the enormous and multidimensional research literature. This engaging book makes a wonderful example of an adaptive radiation accessible to all, and the lavish illustrations, especially the photographs, make the anoles come alive in one's mind."—David Wake, University of California, Berkeley "This magnificent book is a celebration and synthesis of one of the most eventful adaptive radiations known. With disarming prose and personal narrative Jonathan Losos shows how an obsession, beginning at age ten, became a methodology and a research plan that, together with studies by colleagues and predecessors, culminated in many of the principles we now regard as true about the origins and maintenance of biodiversity. This work combines rigorous analysis and glorious natural history in a unique volume that stands with books by the Grants on Darwin's finches among the most informed and engaging accounts ever written on the evolution of a group of organisms in nature."—Dolph Schluter, author of The Ecology of Adaptive Radiation

Sonoran Desert Journeys - Theodore H. Fleming 2022-12-06
This book explores the evolution and natural history of iconic animals and plants of the northern Sonoran Desert through the eyes of a curious naturalist.

Escaping From Predators - William E. Cooper, Jr 2015-05-28
When a predator attacks, prey are faced with a series of 'if', 'when' and 'how' escape decisions – these critical questions are the foci of this book. Cooper and Blumstein bring together a balance of theory and empirical research to summarise over fifty years of scattered research and benchmark current thinking in the rapidly expanding literature on the behavioural ecology of escaping. The book consolidates current and new behaviour models with taxonomically divided empirical chapters that demonstrate the application of escape theory to different groups. The chapters integrate behaviour with physiology, genetics and evolution to lead the reader through the complex decisions faced by prey during a predator attack, examining how these decisions interact with life history and individual variation. The chapter on best practice field methodology and the ideas for future research presented throughout, ensure this volume is practical as well as informative.

Lizard Ecology - Lance D.. McBrayer 2007-07-12
Originally published in 2006, this book was the first critical review of the effects of lizard foraging modes in 30 years.

Behavior of Lizards - Vincent Bels 2019-02-06
Key features: Presents a contemporary snapshot of the mechanisms underlying the evolution and adaptation of behavior Explores how genetics, epigenetics, development, and environment shape behavior Discusses a broad range of behavioral repertoires and responses, including those related to thermoregulatory, foraging, predatory, displaying, social and escape strategies. Examines physiological and sensory mechanisms Covers the effects of various aspects of global change on behavior, with chapters that focus on the impacts of climate change on hydroregulatory behavior and behavioral responses to the effects of habitat alteration resulting from human-mediated change and colonization by invasive

species. Lizards serve as focal organisms for many of biological questions related to evolution, ecology, physiology, and morphology. They are studied at multiple spatial and temporal scales, from the individual to the community level. This book, authored by expert contributors from around the world, explores behaviors underlying the evolution and adaptation of these organisms. It covers conceptual, empirical, and methodological approaches to the understanding of the role that natural and sexual selection play in molding the behavioral traits of lizards. This thorough, illustrated reference should stimulate discussion of the conceptual and methodological approaches for studying the behavioral traits of these fascinating and highly diverse vertebrates.

Introduction to Horned Lizards of North America - Wade C. Sherbrooke 2003-05-08

* Features detailed species accounts; gives information on horned lizard biology, ecology, and evolution; and describes the role of these fascinating reptiles in mythology, culture, and art * Covers the United States, Mexico, and Canada, and includes all species of horned lizards

Comparative Social Evolution - Dustin R. Rubenstein 2017-04-06

A comparative view of the major features of animal social life and the evolution of cooperative group living.

Australian Lizards - Stephen K. Wilson 2012

The extraordinary lives of lizards remain largely hidden from human eyes. Lizards feed, mate, lay eggs or give live birth, and carefully manage their temperatures. They struggle to survive in a complex world of predators and competitors. The nearly 700 named Australian species are divided into seven families: the dragons, monitors, skinks, flap-footed lizards and three families of geckos. Using a vast array of artful strategies, lizards have managed to find a home in virtually all terrestrial habitats. Australian Lizards: A Natural Historytakes the reader on a journey through the remarkable life of lizards. It explores the places in which they live and what they eat, shows how they make use of their senses and how they control their temperatures, how they reproduce and how they defend themselves. Lavishly illustrated with more than 400 color photographs, this book reveals behavioral aspects never before published, offering a fascinating glimpse into the unseen lives of these reptiles. It will appeal to a diverse readership, from those with a general interest in natural history to the seasoned herpetologist.

The Origin of Snakes - Michael Wayne Caldwell 2019-06-28

This book presents perspectives on the past and present state of the understanding of snake origins. It reviews and critiques data and ideas from paleontology and neontology (herpetology), as well as ideas from morphological and molecular phylogenetics. The author reviews the anatomy and morphology of extant snakes. Methods are also critiqued, including those empirical and theoretical methods employed to hypothesize ancestral ecologies for snakes. The modern debate on squamate phylogeny and snake ingroup phylogeny using molecules and morphology is examined critically to provide insights on origins and evolution. Key Features Important major evolutionary transformation in vertebrate evolution Continuing historical debate in vertebrate paleontology Of wide interest to a core audience of paleontologists, herpetologists, and morphologists Author acknowledged as prominent

contributor to debate over snake origins Based on remarkable well preserved fossil specimens

Reptiles: A Very Short Introduction - T. S. Kemp 2019-01-17

For millions of years reptiles have walked, crawled, and slithered over the face of our Earth. From the mighty dinosaurs who dominated the land, the pterosaurs who took to the air, and the marine adapted ichthyosaurs, to the living reptiles today such as the lizards, snakes, crocodiles, and turtles, plus the single species of tuatara in New Zealand, reptiles have come in all shapes and sizes. In this Very Short Introduction Tom Kemp discusses the adaptations reptiles made to first leave the sea and colonise the land in dry conditions, such as their waterproof skin, their ability to expel almost dry waste products, their efficient use of external heat for maintaining their body temperature, and the amniotic egg that is laid and develops on dry land. Considering the different living groups of reptiles today, Kemp then describes how their respective bodies are adapted for their different ways of life, from snake feeding patterns to the way crocodiles breathe. Finally, Kemp assesses the threat of extinction to reptile species due to over-exploitation, habitat destruction, and climate change, and considers what can be done. 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.

Varanoid Lizards of the World - Erick Pianka 2004-09-21

The large and impressive monitor lizard (genus Varanus) has attracted a great deal of interest. Despite being wary and difficult to observe, monitors have received an extraordinary amount of attention from devoted students. Varanoid Lizards of the World is a comprehensive account of virtually everything important that is known about monitor lizards, beginning with detailed species accounts and proceeding to various modern comparative analyses. Where possible, people who have had detailed field experience with a particular species have assembled the species accounts. In the process of reporting what is known, the book also identifies what remains to be learned about these lizards. This volume stands as a model for showing how such a diverse monophyletic group can be exploited both to identify and to understand the actual course of evolution.

Biology of Gila Monsters and Beaded Lizards - Daniel David Beck 2005

"This is the first comprehensive treatment of the biology of the Monstersauria in nearly 50 years, during which time our knowledge has increased dramatically. It gives the reader an unprecedented opportunity to understand the evolution, ecology, and behavior of gila monsters and beaded lizards, as well as insights into folklore, venom, and threats to the existence of these fabled animals."--William Cooper, Indiana University-Purdue University at Fort Wayne "Beck is the foremost authority on these animals and has published extensively on them. He provides a highly readable and fascinating summary of their biology."--Jonathan Campbell, author of Venomous Reptiles of Latin America

The Princeton Guide to Evolution - David A. Baum 2017-03-21

The essential one-volume reference to evolution The Princeton Guide to Evolution is a comprehensive,

concise, and authoritative reference to the major subjects and key concepts in evolutionary biology, from genes to mass extinctions. Edited by a distinguished team of evolutionary biologists, with contributions from leading researchers, the guide contains some 100 clear, accurate, and up-to-date articles on the most important topics in seven major areas: phylogenetics and the history of life; selection and adaptation; evolutionary processes; genes, genomes, and phenotypes; speciation and macroevolution; evolution of behavior, society, and humans; and evolution and modern society. Complete with more than 100 illustrations (including eight pages in color), glossaries of key terms, suggestions for further reading on each topic, and an index, this is an essential volume for undergraduate and graduate students, scientists in related fields, and anyone else with a serious interest in evolution. Explains key topics in some 100 concise and authoritative articles written by a team of leading evolutionary biologists Contains more than 100 illustrations, including eight pages in color Each article includes an outline, glossary, bibliography, and cross-references Covers phylogenetics and the history of life; selection and adaptation; evolutionary processes; genes, genomes, and phenotypes; speciation and macroevolution; evolution of behavior, society, and humans; and evolution and modern society

Reptiles and Amphibians of Australia - Harold Cogger 2018-10-01

Reptiles and Amphibians of Australia is a complete guide to Australia’s rich and varied herpetofauna, including frogs, crocodiles, turtles, tortoises, lizards and snakes. For each of the 1218 species there is a description of its appearance, distribution and habits. These descriptions are also accompanied by distribution maps and, in many cases, one of the book's more than 1000 colour photographs of living animals. The book also includes 130 simple-to-use dichotomous keys, accompanied by hundreds of explanatory drawings, that in most cases allow a specimen in hand to be identified. In addition, it has a comprehensive list of scientific references for those wishing to conduct more in-depth research, an extensive glossary, and basic guides to the collection, preservation and captive care of specimens. This classic work was originally published in 1975. The updated seventh edition contains a new Appendix that discusses recent changes and lists over 80 new or resurrected species and genera that have been added to the Australian frog and reptile fauna since the 2014 edition.

The Secret Social Lives of Reptiles - J. Sean Doody 2021-06

Revealing the secrets of reptilian social relationships through original quantitative research, field studies, laboratory experiments, and careful analysis of the literature, The Secret Social Lives of Reptiles elevates these fascinating animals to key players in the science of behavioral ecology.

Lizards - Eric R. Pianka 2003-09-24

This book provides an overview of the diversity of lizards and their major adaptive features. The authors discuss the latest research findings and provide new hypotheses about lizard diversity.

Geckos - Aaron M. Bauer 2013-03-15

Everything a student, naturalist, or curious observer wants to know about the biology and diversity of geckos. Q: How do geckos walk across ceilings? A: Millions of hair-like setae on each foot. Q: Where do geckos come

from? A: Throughout the world. Usually where it’s warm. Q: How many species of geckos are there? A: Close to 1,500 and counting! Q: What do they eat? A: Insects mostly. Discover the biology, natural history, and diversity of geckos—the acrobatic little lizards made famous by a car insurance ad campaign. Lizard biologist and gecko expert Aaron Bauer answers deceptively simple questions with surprising and little-known facts. Readers can explore color photographs that reveal the natural wonder and beauty of the gecko form and are further informed by images of how geckos live in their natural habitats. Although written for nonexperts, Geckos also provides a carefully selected bibliography and a new list of all known species that will be of interest to herpetologists. Anyone who owns a gecko, has seen them in the wild, or has wondered about them will appreciate this gem of a book.

Herpetology - Laurie J. Vitt 2013-03-25

The fourth edition of the textbook Herpetology covers the basic biology of amphibians and reptiles, with updates in nearly every conceptual area. Not only does it serve as a solid foundation for modern herpetology courses, but it is also relevant to courses in ecology, behavior, evolution, systematics, and morphology. Examples taken from amphibians and reptiles throughout the world make this book a useful herpetology textbook in several countries. Naturalists, amateur herpetologists, herpetoculturists, zoo professionals, and many others will find this book readable and full of relevant natural history and distributional information. Amphibians and reptiles have assumed a central role in research because of the diversity of ecological, physiological, morphological, behavioral, and evolutionary patterns they exhibit. This fully revised edition brings the latest research to the reader, ranging over topics in evolution, reproduction, behavior and more, allowing students and professionals to keep current with a quickly moving field. Heavily revised and updated with discussion of squamate (lizard and snake) taxonomy and new content reflected in current literature Includes increased focus on conservation biology in herpetology while retaining solid content on organismal biology of reptiles and amphibians Presents new photos included from authors' extensive library

Lizards of the World - Mark O'Shea 2021-03-23

Lizards of the World is ultimate book on these fascinating creatures, featuring the all the different types of lizard worldwide. As survivors from the time of the dinosaurs, lizards are scaly, cold-blooded, living fossils—relics from a prehistoric world that remain alive and well in ours. Lizards exert a morbid fascination, in many mythologies they are dark creatures, symbolizing death and misfortune. From chameleons and skinks to geckos and iguanas, Lizards of the World brings these creatures firmly into the light, to reveal their extraordinary diversity Found in almost every type of terrain globally, there are almost 6,500 species of lizard, including lizards with frills, horns, or wings, those that drop their tails, and others that squirt blood from their eyes. Here, the lizard family and subfamily profiles, organized phylogenetically, are illustrated with stunning photography. Each profile includes a population distribution map, a table of essential information, and a fascinating commentary revealing notable characteristics, fresh scientific understanding, and the diversity of species. Written by world-renowned herpetologist Mark O’Shea, Lizards of the World is a magnificent showcase of the natural history

and beauty of these remarkable reptiles.

Field and Laboratory Methods in Animal Cognition - Nereida Bueno-Guerra 2018-07-31

Would you ask a honeybee to point at a screen and recognise a facial expression? Or ask an elephant to climb a tree? While humans and non-human species may inhabit the same world, it's likely that our perceptual worlds differ significantly. Emphasising Uexküll's concept of 'umwelt', this volume offers practical advice on how animal cognition can be successfully tested while avoiding anthropomorphic conclusions. The chapters describe the capabilities of a range of animals - from ants, to lizards to chimpanzees - revealing how to successfully investigate animal cognition across a variety of taxa. The book features contributions from leading cognition researchers, each offering a series of examples and practical tips drawn from their own experience. Together, the authors synthesise information on current field and laboratory methods, providing researchers and graduate students with methodological advice on how to formulate research questions, design experiments and adapt studies to different taxa.

Phylonyms - Kevin de Queiroz 2020-04-30

Phylonyms is an implementation of PhyloCode, which is a set of principles, rules, and recommendations governing phylogenetic nomenclature. Nearly 300 clades - lineages of organisms - are defined by reference to hypotheses of phylogenetic history rather than by taxonomic ranks and types. This volume will document the Real World uses of PhyloCode and will govern and apply to the names of clades, while species names will still be governed by traditional codes. Key Features Provides clear regulations for implementing new guidelines for naming lineages of organisms incorporates expressly evolutionary and phylogenetic principles Works with existing codes of nomenclature Eliminates the reliance on rank-based classification in favor of phylogenetic relationships Related Titles: Rieppel, O. Phylogenetic Systematics: Haeckel to Hennig (ISBN 978-1-4987-5488-0) Cantino, P. D. and de Queiroz, K. International Code of Phylogenetic Nomenclature (PhyloCode) (ISBN 978-1-138-33282-9).

Paleoneurology of Amniotes - María Teresa Dozo 2022-11-22

This book presents a detailed examination of the current state of knowledge in the field of paleoneurology in the main amniote groups (reptiles, birds and mammals), and advances resulting from new non-invasive technologies. The study of fossil endocasts is an area of considerable current interest, and has long been central to our understanding of the evolution of the brain, development of senses and behavioral adaptations in diverse vertebrate groups and across vertebrates as a whole. Recent advances in non-invasive imaging have significantly increased the number of fossil taxa for which brain morphology is known, and it may now be possible to quantitatively analyze the relative size of brain regions. Providing a general overview of current perspectives and problems in evolutionary neuroanatomy, this book is intended for a wide range of readers, including undergraduate and graduate students, teachers, and anyone with a special interest in paleoneurology. It is also useful as supplementary reading for courses in digital anatomy, vertebrate comparative anatomy, computed morphometrics, paleontology, neurology and radiology as well as evolution programs

Secrets of the Snake Charmer - John C. Murphy 2010-04-16

Note that there is a companion website for this book and

it can be seen at: http://secretsofthesnakecharmer.blogspot.com/ Humans and snakes have an intimate and ancient relationship that often revolves around either love or hate. Snakes can be seen as gods, spiritual messengers, symbols of fertility, and guardians of resources in virtually all cultures. But to those that fear them, snakes are seen as venomous creatures that cannot be trusted. In Secrets of the Snake Charmer, John Murphy, a research associate of the Division of Amphibians and Reptiles in the Field Museum of Natural History in Chicago, provides an in-depth, twenty-first century look at snakes utilizing the published research of other herpetologists as well as his own personal experiences and speculations. Murphy covers a wide range of topics such as the adaptability of snakes, the ways in which evolution has tinkered with snakes during the last 160 million years, and the impact snakes have on the ecological communities they live in. While sharing ideas about the origin of snakes, rattlesnake rattles, and spitting in cobras, Murphy presents an innovative portrayal of snakes that proves they co-evolve with their prey, predators, and parasites in order to fulfill a significant and novel role in the web of life.

Evolution's Wedge - David W. Pfennig 2012-10-25

Despite Darwin's emphasis, competition's role in diversification remains controversial and largely underappreciated.

Health and Welfare of Captive Reptiles - Clifford Warwick 2023-02-25

This extensively revised and expanded new edition offers concepts, principles and applied information that relates to the wellbeing of reptiles. As a manual on health and welfare in a similar vein to volumes addressing the sciences of anatomy, behaviour or psychology, this book thoroughly examines the biology of reptile welfare and is about meeting biological needs. The editors, acknowledged experts in their own right, have once again drawn together an extremely impressive international group of contributors. Positive and negative implications of general husbandry and research programs are discussed. In addition to greatly revised original content are nine new chapters offering readers novel insight into: • sensory systems • social behaviour • brain and cognition • controlled deprivation and enrichment • effects of captivity-imposed noise and light disturbance on welfare • spatial and thermal factors• evidential thresholds for species suitability in captivity • record keeping as an aid to captive care • arbitrary husbandry practices and misconceptions The authors have adopted a user-friendly writing style to accommodate a broad readership. Although primarily aimed at academic professionals, this comprehensive volume is fundamentally a biology book that will also inform all involved in captive reptile husbandry. Among others, zoo personnel, herpetologists, veterinarians, lab animal scientists, and expert readers in animal welfare and behavioural studies will benefit from this updated work.

Lizard - Boria Sax 2017-10-15

Our storybooks are full of lizards, but we usually call them something else—dragons, serpents, dinosaurs or monsters. These stories vastly increase their size, bestow wings upon them, make them exhale flame, and endow them with magical powers. Lizards stimulate the human imagination unlike most other animals, despite generally being small, soundless, and hidden from sight in burrows, treetops, and crevices. They can blend into a vast range of environments, from rocky coasts to

deserts to rain forests. Their fluid motion can make us think of water, while their curvilinear form suggests vegetation. Their stillness suggests death, while their sudden arousal is like resurrection. This delightful book gives lizards their due, demonstrating how the story of lizards is interwoven with the history of human imagination. Boria Sax considers the lizard as a sensual being—a symbol, a myth, a product of evolution and an aesthetic form. He describes the diversity of lizards and traces the representation of the reptile in cultures including those of pre-conquest Australia, the Quiché Maya, Mughal India, and central Africa. Illustrated throughout with beguiling images, Lizard is a unique and often surprising introduction to a popular but little-understood reptile.

Behavior of Exotic Pets - Valarie V. Tynes 2013-05-31
Behavior of Exotic Pets is the first book on the subject tobe written by behavioral experts, all with a wealth of practicalexperience. Divided into species-specific chapters, the bookexplains the normal behavior for each group of animals, includingreproduction, parenting, communication and social behavior. Thebook also addresses animals' environmental needs based ontheir behavior to enable owners to provide better husbandry andavoid potential problems. Descriptions of common behavioralproblems are included, with practical recommendations for theirtreatment or management. This text is essential for any veterinary professional who wouldlike to improve their knowledge of exotic animal behavior. It alsoserves as a valuable reference for animal behaviorists, exoticanimal veterinarians, veterinary students, and anyone caring forthese animals in captivity. Key features: The first and only book on exotic pet behavior written bybehaviorists Covers a wide range of exotic pet species Discusses methods for treating and managing common behavioralproblems Offers practical advice on topics such as housing and handlingof animals Includes separate chapters on learning, welfare, and behavioralpharmacology

New Zealand Lizards - David G. Chapple 2016-10-05
This edited volume is a timely and comprehensive summary of the New Zealand lizard fauna. Nestled in the south-west Pacific, New Zealand is a large archipelago that displays the faunal signatures of both its Gondwanan origins, and more recent oceanic island influences. New Zealand was one of the last countries on Earth to be discovered, and likewise, the full extent of the faunal diversity present within the archipelago is only just starting to be appreciated. This is no better exemplified than in lizards, where just 30 species (20 skinks, 10 geckos) were recognized in the 1950s, but now 104 are formally or informally recognized (61 skinks, 43 geckos). Thus, New Zealand contains one of the most diverse lizard faunas of any cool, temperate region on Earth. This book brings together the world's leading experts in the field to produce an authoritative overview of the history, taxonomy, biogeography, ecology, life-history, physiology and conservation of New Zealand lizards.