

The Depths The Evolutionary Origins Of The Depress

When somebody should go to the books stores, search creation by shop, shelf by shelf, it is in point of fact problematic. This is why we offer the books compilations in this website. It will extremely ease you to see guide **the depths the evolutionary origins of the depress** as you such as.

By searching the title, publisher, or authors of guide you in point of fact want, you can discover them rapidly. In the house, workplace, or perhaps in your method can be all best place within net connections. If you try to download and install the the depths the evolutionary origins of the depress, it is categorically easy then, previously currently we extend the partner to buy and make bargains to download and install the depths the evolutionary origins of the depress thus simple!

WTF, Evolution?! Mara Grunbaum 2014-10-07 We all have our off days. Why should Evolution be any different? Maybe Evolution got carried away with an idea that was just a little too crazy—like having the Regal Horned Lizard defend itself by shooting three-foot streams of blood from its eyes. Or maybe Evolution ran out of steam (Memo to Evolution: The Irrawaddy Dolphin looks like a prototype that should have been left on the drawing board). Or maybe Evolution was feeling cheeky—a fish with hands? Joke’s on you, Red Handfish! Or maybe Evolution simply goofed up: How else to explain the overgrown teeth of the babirusas that curl backward over their face? Oops. Mara Grunbaum is a very smart, very funny science writer who celebrates the best—or, really, the worst—of Evolution’s blunders. Here are more than 100 outlandish mammals, reptiles, insects, fish, birds, and other creatures whose very existence leaves us shaking our heads and muttering WTF?! Ms. Grunbaum’s especially brilliant stroke is to personify Evolution as a well-meaning but somewhat oblivious experimenter whose conversations with a skeptical narrator are hilarious. For almost 4 billion years, Evolution has produced a nonstop parade of inflatable noses, bizarre genitalia, and seriously awkward necks. What a comedian!

A New History of Life Peter Ward 2015-04-07 The history of life on Earth is, in some form or another, known to us all—or so we think. A New History of Life offers a provocative new account, based on the latest scientific research, of how life on our planet evolved—the first major new synthesis for general readers in two decades. Charles Darwin's theories, first published more than 150 years ago, form the backbone of how we understand the history of the Earth. In reality, the currently accepted history of life on Earth is so flawed, so out of date, that it's past time we need a 'New History of Life.' In their latest book, Joe Kirschvink and Peter Ward will show that many of our most cherished beliefs about the evolution of life are wrong. Gathering and analyzing years of discoveries and research not yet widely known to the public, A New History of Life proposes a different origin of species than the one Darwin proposed, one which includes eight-foot-long centipedes, a frozen “snowball Earth”, and the seeds for life originating on Mars. Drawing on their years of experience in paleontology, biology, chemistry, and astrobiology, experts Ward and Kirschvink paint a picture of the origins life on Earth that are at once too fabulous to imagine and too familiar to dismiss—and looking

forward, *A New History of Life* brilliantly assembles insights from some of the latest scientific research to understand how life on Earth can and might evolve far into the future.

Phylogeny and Evolution of the Mollusca Winston Ponder 2008-03-25 "Ponder and Lindberg provides a breathtaking overview of the evolutionary history of the Mollusca, effectively melding information from anatomy, ecology, genomics, and paleobiology to explore the depths of molluscan phylogeny. Its outstanding success is due to thoughtful planning, focused complementary contributions from 36 expert authors, and careful editing. This volume is a must for malacologists."—Bruce Runnegar, Department of Earth and Space Sciences, University of California, Los Angeles "Our understanding of the phylogeny and evolutionary history of the mollusca has been revolutionized over the past two decades through new molecular data and analysis, and reinvestigation of morphological characters. In this volume Ponder, Lindberg, and their colleagues do a wonderful job of integrating this work to provide new perspectives on the relationships of the major molluscan clades, their evolutionary dynamics, and their history. Particularly timely is the coverage of molluscan evo-devo and genomics."—Douglas H. Erwin, Curator of Paleozoic Invertebrates, National Museum of Natural History

Evolution of a Taboo Max D. Price 2020-12-18 Pigs are among the most peculiar animals domesticated in the Ancient Near East. Their story, from domestication to taboo, has fascinated historians, archaeologists, and religious studies scholars for decades. Rejecting simple explanations, this book adopts an evolutionary approach that relies on zooarchaeology and texts to unravel the cultural significance of swine in the Near East from the Paleolithic to the present day. Five major themes are covered: The domestication of the pig from wild boars in the Neolithic period, the unique roles that pigs developed in agricultural economies before and after the development of complex societies, the raising of swine in cities, the shifting ritual roles of pigs, and the formation and development of the pork taboo in Judaism and, later, Islam. The origins and significance of this taboo have inspired much debate. *Evolution of a Taboo* contends that the well-known taboo described in Leviticus evolved over time, beginning with conflicts between Israelites and Philistines in the early part of the Iron Age, and later was mobilized by Judah's priestly elite in the writing of the Biblical texts. Centuries later, the pig taboo became a point of contention in the ethno-political struggles between Jewish and Greco-Roman cultures in the Levant; later still, between Jews, Christians, and Muslims. Through these conflicts, the pig taboo grew in power. As this rich account illustrates, it came to define the relations between pigs and people in the Near East and beyond, up to the present day.

Religion Explained Pascal Boyer 2007-03-21 Many of our questions about religion, says renowned anthropologist Pascal Boyer, are no longer mysteries. We are beginning to know how to answer questions such as "Why do people have religion?" Using findings from anthropology, cognitive science, linguistics, and evolutionary biology, *Religion Explained* shows how this aspect of human consciousness is increasingly amenable to coherent, naturalistic explanation. This brilliant and controversial book gives readers the first scientific explanation for what religious feeling is really about, what it consists of, and where it comes from.

The Case Against Reality: Why Evolution Hid the Truth from Our Eyes Donald Hoffman 2019-08-13 Can we trust our senses to tell us the truth? Challenging

leading scientific theories that claim that our senses report back objective reality, cognitive scientist Donald Hoffman argues that while we should take our perceptions seriously, we should not take them literally. How can it be possible that the world we see is not objective reality? And how can our senses be useful if they are not communicating the truth? Hoffman grapples with these questions and more over the course of this eye-opening work. Ever since Homo sapiens has walked the earth, natural selection has favored perception that hides the truth and guides us toward useful action, shaping our senses to keep us alive and reproducing. We observe a speeding car and do not walk in front of it; we see mold growing on bread and do not eat it. These impressions, though, are not objective reality. Just like a file icon on a desktop screen is a useful symbol rather than a genuine representation of what a computer file looks like, the objects we see every day are merely icons, allowing us to navigate the world safely and with ease. The real-world implications for this discovery are huge. From examining why fashion designers create clothes that give the illusion of a more "attractive" body shape to studying how companies use color to elicit specific emotions in consumers, and even dismantling the very notion that spacetime is objective reality, *The Case Against Reality* dares us to question everything we thought we knew about the world we see.

The Origins and History of Consciousness Erich Neumann 2014-08-24 *The Origins and History of Consciousness* draws on a full range of world mythology to show how individual consciousness undergoes the same archetypal stages of development as human consciousness as a whole. Erich Neumann was one of C. G. Jung's most creative students and a renowned practitioner of analytical psychology in his own right. In this influential book, Neumann shows how the stages begin and end with the symbol of the Uroboros, the tail-eating serpent. The intermediate stages are projected in the universal myths of the World Creation, Great Mother, Separation of the World Parents, Birth of the Hero, Slaying of the Dragon, Rescue of the Captive, and Transformation and Deification of the Hero. Throughout the sequence, the Hero is the evolving ego consciousness. Featuring a foreword by Jung, this Princeton Classics edition introduces a new generation of readers to this eloquent and enduring work.

The Vital Question Nick Lane 2016-04-07 Why is life the way it is? Bacteria evolved into complex life just once in four billion years of life on earth—and all complex life shares many strange properties, from sex to ageing and death. If life evolved on other planets, would it be the same or completely different? In *The Vital Question*, Nick Lane radically reframes evolutionary history, putting forward a cogent solution to conundrums that have troubled scientists for decades. The answer, he argues, lies in energy: how all life on Earth lives off a voltage with the strength of a bolt of lightning. In unravelling these scientific enigmas, making sense of life's quirks, Lane's explanation provides a solution to life's vital questions: why are we as we are, and why are we here at all? This is ground-breaking science in an accessible form, in the tradition of Charles Darwin's *The Origin of Species*, Richard Dawkins' *The Selfish Gene*, and Jared Diamond's *Guns, Germs and Steel*.

Human Origins New Scientist 2018-05-29 Where did we come from? Where are we going? Homo sapiens is the most successful, the most widespread and the most influential species ever to walk the Earth. In the blink of an evolutionary eye we have spread around the globe, taken control of Earth's biological and mineral resources, transformed the environment, discovered the secrets of the universe and travelled into space. Yet just 7 million years ago, we were just another species of great ape making a quiet living in the forests of East

Africa. We do not know exactly what this ancestor was like, but it was no more likely than a chimpanzee or gorilla to sail across the ocean, write a symphony, invent a steam engine or ponder the meaning of existence. How did we get from there to here? The Story of Human Origins recounts the most astonishing evolutionary tale ever told. Discover how our ancestors made the first tentative steps towards becoming human, how we lost our fur but gained language, fire and tools, how we strode out of Africa, invented farming and cities and ultimately created modern civilization - perhaps the only one of its kind in the Universe. Meet your long-lost ancestors, the other humans who once shared the planet with us, and learn where the story might end.

Genesis: The Deep Origin of Societies Edward O. Wilson 2019-03-19 Forming a twenty-first-century statement on Darwinian evolution, one shorn of "religious and political dogma," Edward O. Wilson offers a bold work of scientific thought and synthesis. Asserting that religious creeds and philosophical questions can be reduced to purely genetic and evolutionary components, and that the human body and mind have a physical base obedient to the laws of physics and chemistry, Genesis demonstrates that the only way for us to fully understand human behavior is to study the evolutionary histories of nonhuman species. Of these, Wilson demonstrates that at least seventeen—among them the African naked mole rat and the sponge-dwelling shrimp—have been found to have advanced societies based on altruism and cooperation. Whether writing about midges who "dance about like acrobats" or schools of anchovies who protectively huddle "to appear like a gigantic fish," or proposing that human society owes a debt of gratitude to "postmenopausal grandmothers" and "childless homosexuals," Genesis is a pithy yet path-breaking work of evolutionary theory, braiding twenty-first-century scientific theory with the lyrical biological and humanistic observations for which Wilson is known.

The Price of Altruism: George Price and the Search for the Origins of Kindness Oren Harman 2011-06-20 Describes the intellectual journey of eccentric American genius George Price, who tried to answer the evolutionary riddle of why people are nice, and eventually gave away all his belongings and took his own life in a squatter's flat.

Smart and SeXy Roderick Kaine 2016-06-08 With more than 300 citations of peer-reviewed journal articles, Smart and SeXy presents the latest research with regards to sex differences in intelligence and their biological causes all in one place. It also provides evolutionary rationales for why and how sex differences in intelligence evolved to begin with; and it does so without concern for what is or is not politically correct. With the "acceptable" narrative abandoned, it openly and honestly explores the differences between the genders. Roderick Kaine is an American who has a degree in biochemistry, and he has done professional research in both Biology and Neuroscience. After moving on from this work, he has focused on writing and independent scholarship. He has been active in the neoreactionary movement, where he writes under the name Atavisionary (www.atavisionary.com).

Vital Dust Christian De Duve 1995-01-03 Addressing the questions of unicellular life, extraterrestrial involvement, oxygen's link to complex life, and the superior evolution of bacteria, a biochemist and winner of the Nobel Prize discusses the evolution of life on Earth. National ad/promo.

The Ancestor's Tale Richard Dawkins 2005 A renowned biologist provides a sweeping chronicle of more than four billion years of life on Earth, shedding

new light on evolutionary theory and history, sexual selection, speciation, extinction, and genetics.

A Pocket History of Human Evolution Silvana Condemi 2019-11-01 Why aren't we more like other apes? How did we win the evolutionary race? Find out how "wise" Homo sapiens really are. Prehistory has never been more exciting: New discoveries are overturning long-held theories left and right. Stone tools in Australia date back 65,000 years—a time when, we once thought, the first Sapiens had barely left Africa. DNA sequencing has unearthed a new hominid group—the Denisovans—and confirmed that crossbreeding with them (and Neanderthals) made Homo sapiens who we are today. A Pocket History of Human Evolution brings us up-to-date on the exploits of all our ancient relatives. Paleoanthropologist Silvana Condemi and science journalist François Savatier consider what accelerated our evolution: Was it tools, our "large" brains, language, empathy, or something else entirely? And why are we the sole survivors among many early bipedal humans? Their conclusions reveal the various ways ancient humans live on today—from gossip as modern "grooming" to our gendered division of labor—and what the future might hold for our strange and unique species.

Six Impossible Things Before Breakfast: The Evolutionary Origins of Belief

Lewis Wolpert 2008-07-17 "Marvelously funny and provocative."—Publishers Weekly Why do 70 percent of Americans believe in angels, while others are convinced that they were abducted by aliens? What makes people believe in improbable things when all the evidence points to the contrary? And don't almost all of us, at some time or another, engage in magical thinking? In Six Impossible Things Before Breakfast, evolutionary biologist Lewis Wolpert delves into the important and timely debate over the nature of belief, looking at its psychological foundations to discover just what evolutionary purpose it could serve. Wolpert takes us through all that science can tell us about the beliefs we feel are instinctive. He deftly explores different types of belief—those of children, of the religious, and of those suffering from psychiatric disorders—and he asks whether it is possible to live without belief, or whether it is a necessary component of a functioning society.

Cooperative Evolution Christopher Bryant 2021-03-16 Cooperative Evolution offers a fresh account of evolution consistent with Charles Darwin's own account of a cooperative, inter-connected, buzzing and ever-changing world. Told in accessible language, treating evolutionary change as a cooperative enterprise brings some surprising shifts from the traditional emphasis on the dominance of competition. The book covers many evolutionary changes reconsidered as cooperation. These include the cooperative origins of life, evolution as a spiral rather than a ladder or tree, humans as a part of natural systems rather than the purpose, relationships between natural and social change, and the role of the individual in adaptive radiation onto new ground. The story concludes with a projection of human evolution from the past into the future. 'Environmental studies courses have needed a book like Cooperative Evolution for a long time. It is a boon for those teaching the complexity of the evolutionary story.' – Dr John A. Harris, BSc(Hons) MSc PhD, School of Environmental Science, University of Canberra 'As a regenerative, holistic-thinking farmer I daily witness the results of cooperative evolution as the seasons unfold. A pleasure to read, Cooperative Evolution gives entry to recent thinking on evolutionary processes.' – David Marsh, MSA, 'Allendale', Boorowa, New South Wales, 2018 National Individual Landcarer Award recipient 'This book is an engaging new look at ideas about evolution as we know it today. In the

hands of two eminent biologists, it presents an approachable yet challenging argument. I heartily recommend it.' – Emeritus Professor Sue Stocklmayer AO, BSc MSc PhD, Centre for the Public Awareness of Science, The Australian National University

Men Richard G. Bribiescas 2006 Males account for roughly 50 percent of the global population, but in America and other places, they account for over 85 percent of violent crime. A graph of relative risk of death in human males shows that mortality is high immediately following birth, falls during childhood, then exhibits a distinct rise between the ages of 15 and 35—primarily the result of accidents, violence, and risky behaviors. Why? What compels males to drive fast, act violently, and behave stupidly? Why are men's lives so different from those of women? *Men* presents a new approach to understanding the human male by drawing upon life history and evolutionary theory. Because life history theory focuses on the timing of, and energetic investment in, particular aspects of physiology, such as growth and reproduction, Richard Bribiescas and his fellow anthropologists are now using it in the study of humans. This has led to an increased understanding of human female physiology—especially growth and reproduction—from an evolutionary and life history perspective. However, little attention has been directed toward these characteristics in males. *Men* provides a new understanding of human male physiology and applies it to contemporary health issues such as prostate cancer, testosterone replacement therapy, and the development of a male contraceptive. *Men* proves that understanding human physiology requires global research in traditionally overlooked areas and that evolutionary and life history theory have much to offer toward this endeavor.

Depression Jonathan Rottenberg 2021 "This chapter grapples with the challenges of defining depression, including challenges that arise from our imprecise use of language. Depression is at its core a kind of mood state. Mood states organize our minds and our bodies and motivate us to pursue goals. It is possible to understand depression by focusing on the scientific principles that explain why humans and other organisms have mood. A key goal is to become a more educated consumer of one's own mood and to understand the forces that operate on mood more generally. This framework can allow us to understand why people become depressed, why depression has occurred over human history, and why depression might be epidemic in some periods in human history, including the present day"--

Origins Lewis Dartnell 2019-01-31 Read the Sunday Times bestseller that reveals the Earth's awesome impact on the shape of human civilisations. 'Stands comparison with *Sapiens*... Thrilling' Sunday Times Human evolution in East Africa was driven by geological forces. Ancient Greece developed democracy because of its mountainous terrain. Voting behaviour in the United States today follows the bed of an ancient sea. Professor Lewis Dartnell takes us on an astonishing journey into our planet's past to tell the ultimate origin story. Blending science and history, *Origins* reveals the Earth's awesome impact on the shape of human civilisations – and helps us to see the challenges and opportunities of the future. 'A sweeping, brilliant overview of the history not only of our species but of the world' Peter Frankopan, author of *The Silk Roads* 'Absorbing... A first-class read – and an important one' Observer

The Sacred Depths of Nature Ursula Goodenough 1998 Documentary looking at caravan enthusiasts and how they have made their caravans into a way of life. The programme includes tips from caravan veterans about restoration, interiors,

gadgets and accessories.

Synuclein and the Coelacanth James M. Gruschus 2021-01-31 Most neurodegenerative diseases have animal parallels such as Alzheimer's in chimpanzees, multiple sclerosis in macaques, Lou Gehrig's disease in dogs, but nothing like Parkinson's has ever been seen in any species but humans. *Synuclein and the Coelacanth: The Molecular and Evolutionary Origins of Parkinson's Disease* delves into the causes of Parkinson's disease and how the evolution of the human brain has left us uniquely vulnerable. Genetic risk factors, environmental toxins, and neuroanatomy are woven together in a multidisciplinary discussion that ranges from subatomic physics to socioeconomics. Connections between neurodegenerative disease, neural pathways, and innate immunity are explored. Finally, the author discusses new therapeutic agents are being developed that hope to go beyond just treating the symptoms of Parkinson's and actually halt the disease. Proposes a new hypothesis on the origins of Parkinson's disease Examines genetic risk factors, environmental toxins, and neuroanatomy of PD Highlights new therapeutic treatment options in development for patients

Darwin, God and the Meaning of Life Steve Stewart-Williams 2010-09-30 If you accept evolutionary theory, can you also believe in God? Are human beings superior to other animals, or is this just a human prejudice? Does Darwin have implications for heated issues like euthanasia and animal rights? Does evolution tell us the purpose of life, or does it imply that life has no ultimate purpose? Does evolution tell us what is morally right and wrong, or does it imply that ultimately 'nothing' is right or wrong? In this fascinating and intriguing book, Steve Stewart-Williams addresses these and other fundamental philosophical questions raised by evolutionary theory and the exciting new field of evolutionary psychology. Drawing on biology, psychology and philosophy, he argues that Darwinian science supports a view of a godless universe devoid of ultimate purpose or moral structure, but that we can still live a good life and a happy life within the confines of this view.

*Humans: A Brief History of How We F*cked It All Up* Tom Phillips 2019-05-07 *NOW AN INTERNATIONAL BESTSELLER* A Toronto Star Bestselling Book of the Year "Witty and entertaining."—Sarah Knight "Laugh-out-loud."—Steve Brusatte AN EXHILARATING JOURNEY THROUGH THE MOST CREATIVE AND CATASTROPHIC F*CK-UPS OF HUMAN HISTORY Modern humans have come a long way in the seventy thousand years they've walked the earth. Art, science, culture, trade—on the evolutionary food chain, we're true winners. But it hasn't always been smooth sailing, and sometimes—just occasionally—we've managed to truly f*ck things up. Weaving together history, science, politics and pop culture, *Humans* offers a panoramic exploration of humankind in all its glory, or lack thereof. From Lucy, our first ancestor, who fell out of a tree and died, to General Zhou Shou of China, who stored gunpowder in his palace before a lantern festival, to the Austrian army attacking itself one drunken night, to the most spectacular fails of the present day, *Humans* reveals how even the most mundane mistakes can shift the course of civilization as we know it. Lively, wry and brimming with brilliant insight, this unique compendium offers a fresh take on world history and is one of the most entertaining reads of the year.

The Book of Humans Adam Rutherford 2018-09-06 'Charming, compelling and packed with information. I learned more about biology from this short book than I did from years of science lessons. A weird and wonderful read' PETER FRANKOPAN We like to think of ourselves as exceptional beings, but is there really anything

special about us that sets us apart from other animals? Humans are the slightest of twigs on a single family tree that encompasses four billion years, a lot of twists and turns, and a billion species. All of those organisms are rooted in a single origin, with a common code that underwrites our existence. This paradox - that our biology is indistinct from all life, yet we consider ourselves to be special - lies at the heart of who we are. In this original and entertaining tour of life on Earth, Adam Rutherford explores how many of the things once considered to be exclusively human are not: we are not the only species that communicates, makes tools, utilises fire, or has sex for reasons other than to make new versions of ourselves. Evolution has, however, allowed us to develop our culture to a level of complexity that outstrips any other observed in nature. THE BOOK OF HUMANS tells the story of how we became the creatures we are today, bestowed with the unique ability to investigate what makes us who we are. Illuminated by the latest scientific discoveries, it is a thrilling compendium of what unequivocally fixes us as animals, and reveals how we are extraordinary among them. With illustrations by Alice Roberts

Thank God for Evolution Michael Dowd 2008 Presents a philosophy that unifies evolution and religion, discussing evolution as a divine process, how to use insights derived from evolution to improve spiritual life, and how to work for systemic change within this framework.

Mothers and Others Sarah Blaffer Hrdy 2011-04-15 Mothers and Others finds the key in the primatologically unique length of human childhood. Renowned anthropologist Sarah Hrdy argues that if human babies were to survive in a world of scarce resources, they would need to be cared for, not only by their mothers but also by siblings, aunts, fathers, friends—and, with any luck, grandmothers. Out of this complicated and contingent form of childrearing, Hrdy argues, came the human capacity for understanding others. In essence, mothers and others teach us who will care, and who will not.

The Depths Jonathan Rottenberg 2014-02-11 Nearly every depressed person is assured by doctors, well-meaning friends and family, the media, and ubiquitous advertisements that the underlying problem is a chemical imbalance. Such a simple defect should be fixable, yet despite all of the resources that have been devoted to finding a pharmacological solution, depression remains stubbornly widespread. Why are we losing this fight? In this humane and illuminating challenge to defect models of depression, psychologist Jonathan Rottenberg argues that depression is a particularly severe outgrowth of our natural capacity for emotion. In other words, it is a low mood gone haywire. Drawing on recent developments in the science of mood—and his own harrowing depressive experience as a young adult—Rottenberg explains depression in evolutionary terms, showing how its dark pull arises from adaptations that evolved to help our ancestors ensure their survival. Moods, high and low, evolved to compel us to more efficiently pursue rewards. While this worked for our ancestors, our modern environment—in which daily survival is no longer a sole focus—makes it all too easy for low mood to slide into severe, long-lasting depression. Weaving together experimental and epidemiological research, clinical observations, and the voices of individuals who have struggled with depression, *The Depths* offers a bold new account of why depression endures—and makes a strong case for de-stigmatizing this increasingly common condition. In so doing, Rottenberg offers hope in the form of his own and other patients' recovery, and points the way towards new paths for treatment.

Good Reasons for Bad Feelings Randolph M. Nesse, MD 2019-02-12 A founder of the

field of evolutionary medicine uses his decades of experience as a psychiatrist to provide a much-needed new framework for making sense of mental illness. Why do I feel bad? There is real power in understanding our bad feelings. With his classic *Why We Get Sick*, Dr. Randolph Nesse helped to establish the field of evolutionary medicine. Now he returns with a book that transforms our understanding of mental disorders by exploring a fundamentally new question. Instead of asking why certain people suffer from mental illness, Nesse asks why natural selection has left us all with fragile minds. Drawing on revealing stories from his own clinical practice and insights from evolutionary biology, Nesse shows how negative emotions are useful in certain situations, yet can become overwhelming. Anxiety protects us from harm in the face of danger, but false alarms are inevitable. Low moods prevent us from wasting effort in pursuit of unreachable goals, but they often escalate into pathological depression. Other mental disorders, such as addiction and anorexia, result from the mismatch between modern environment and our ancient human past. And there are good evolutionary reasons for sexual disorders and for why genes for schizophrenia persist. Taken together, these and many more insights help to explain the pervasiveness of human suffering, and show us new paths for relieving it by understanding individuals as individuals.

Life on a Young Planet Andrew H. Knoll 2015-03-22 Australopithecines, dinosaurs, trilobites--such fossils conjure up images of lost worlds filled with vanished organisms. But in the full history of life, ancient animals, even the trilobites, form only the half-billion-year tip of a nearly four-billion-year iceberg. Andrew Knoll explores the deep history of life from its origins on a young planet to the incredible Cambrian explosion, presenting a compelling new explanation for the emergence of biological novelty. The very latest discoveries in paleontology--many of them made by the author and his students--are integrated with emerging insights from molecular biology and earth system science to forge a broad understanding of how the biological diversity that surrounds us came to be. Moving from Siberia to Namibia to the Bahamas, Knoll shows how life and environment have evolved together through Earth's history. Innovations in biology have helped shape our air and oceans, and, just as surely, environmental change has influenced the course of evolution, repeatedly closing off opportunities for some species while opening avenues for others. Readers go into the field to confront fossils, enter the lab to discern the inner workings of cells, and alight on Mars to ask how our terrestrial experience can guide exploration for life beyond our planet. Along the way, Knoll brings us up-to-date on some of science's hottest questions, from the oldest fossils and claims of life beyond the Earth to the hypothesis of global glaciation and Knoll's own unifying concept of "'permissive ecology.'" In laying bare Earth's deepest biological roots, *Life on a Young Planet* helps us understand our own place in the universe--and our responsibility as stewards of a world four billion years in the making. In a new preface, Knoll describes how the field has broadened and deepened in the decade since the book's original publication.

Only a Theory Kenneth Raymond Miller 2008 Evaluates the debate between advocates for evolution and intelligent design which occurred during the 2005 Dover evolution trial, dissecting the claims of the intelligent design movement and explaining why the conflict is compromising America's position a

Evolutionary Tales Matt Cumberly 2015-10-01 *Evolutionary Tales* is a children's book that introduces the concept of evolution through 10 poems focusing on the wildest-evolved creatures of our world!

Shadows of Forgotten Ancestors Carl Sagan 2011-07-06 NATIONAL BESTSELLER •
“Exciting and provocative . . . A tour de force of a book that begs to be seen as well as to be read.”—The Washington Post Book World World renowned scientist Carl Sagan and acclaimed author Ann Druyan have written a Roots for the human species, a lucid and riveting account of how humans got to be the way we are. *Shadows of Forgotten Ancestors* is a thrilling saga that starts with the origin of the Earth. It shows with humor and drama that many of our key traits—self-awareness, technology, family ties, submission to authority, hatred for those a little different from ourselves, reason, and ethics—are rooted in the deep past, and illuminated by our kinship with other animals. Sagan and Druyan conduct a breathtaking journey through space and time, zeroing in on critical turning points in evolutionary history, and tracing the origins of sex, altruism, violence, rape, and dominance. Their book culminates in a stunningly original examination of the connection between primate and human traits. Astonishing in its scope, brilliant in its insights, and an absolutely compelling read, *Shadows of Forgotten Ancestors* is a triumph of popular science.

Our Cosmic Origins Armand H. Delsemme 1998 *Our Cosmic Origins*, first published in 1998, traces the remarkable story of the emergence of life and intelligence right through the complex evolutionary history of the Universe. Armand Delsemme weaves together a rich tapestry of science, bringing together cosmology, astronomy, geology, biochemistry and biology in this wide-ranging book. In following the complex, chronological story, we discover how the first elements formed in the early Universe, how stars and planets were born, how the first bacteria evolved towards a plethora of plants and animals, and how the coupling of the eye and brain led to the development of self-awareness and, ultimately, intelligence. Professor Delsemme concludes with the tantalising suggestion that the existence of alien life and intelligence is likely, and examines our chances of contacting it. This provocative book provides the general reader with an accessible and wide-ranging account of how life evolved on Earth and how likely it is to exist elsewhere in the Universe.

Plant Evolution Karl J. Niklas 2016-08-12 Although plants comprise more than 90% of all visible life, and land plants and algae collectively make up the most morphologically, physiologically, and ecologically diverse group of organisms on earth, books on evolution instead tend to focus on animals. This organismal bias has led to an incomplete and often erroneous understanding of evolutionary theory. Because plants grow and reproduce differently than animals, they have evolved differently, and generally accepted evolutionary views—as, for example, the standard models of speciation—often fail to hold when applied to them. Tapping such wide-ranging topics as genetics, gene regulatory networks, phenotype mapping, and multicellularity, as well as paleobotany, Karl J. Niklas’s *Plant Evolution* offers fresh insight into these differences. Following up on his landmark book *The Evolutionary Biology of Plants*—in which he drew on cutting-edge computer simulations that used plants as models to illuminate key evolutionary theories—Niklas incorporates data from more than a decade of new research in the flourishing field of molecular biology, conveying not only why the study of evolution is so important, but also why the study of plants is essential to our understanding of evolutionary processes. Niklas shows us that investigating the intricacies of plant development, the diversification of early vascular land plants, and larger patterns in plant evolution is not just a botanical pursuit: it is vital to our comprehension of the history of all life on this green planet.

Rare Earth Peter D. Ward 2007-05-08 What determines whether complex life will arise on a planet, or even any life at all? Questions such as these are investigated in this groundbreaking book. In doing so, the authors synthesize information from astronomy, biology, and paleontology, and apply it to what we know about the rise of life on Earth and to what could possibly happen elsewhere in the universe. Everyone who has been thrilled by the recent discoveries of extrasolar planets and the indications of life on Mars and the Jovian moon Europa will be fascinated by *Rare Earth*, and its implications for those who look to the heavens for companionship.

Bittersweet Destiny Del Thiessen 2017-09-08 *Bittersweet Destiny* combines discourse on the evolution of human behavior with a philosophical perspective. It explores evolutionary theory aimed at determining human behavior. Del Thiessen presents this material against the broad background of everyday life, allowing the reader to see the theory of evolution as it has shaped his or her own behavior. However, he points out that when evolutionary theory is aimed at human behavior, the critics object, and controversy results. Thiessen argues that nothing in our lives makes sense unless we look at it through a biological lens. We can thereby understand our origin, our affiliation with all animals and plants, and our cultural destination. However, we can also discover a dark side to our destiny—our favoritism to those who share our own genes, our ability to deceive, and our capacity for abuse, rape, and murder. Good, bad, and indifferent, we serve the replication of our DNA. Critics extrapolate evolutionary theory to a wide range of animal species, and even human morphology and physiology, but when the same perspective is applied to human behavior there is strong dissent. What these critics fear, according to Thiessen, is that accepting evolutionary notions about human behavior strikes at the heart of free will, self-determination, and social equality. *Bittersweet Destiny* describes the heroic efforts of naturalists Charles Darwin and Alfred Wallace to unlock the secrets of evolution. It continues with a vivid description of our fossil history and our chance beginnings. From there the story implicates disease processes in evolution, highlights our rational and irrational nature, focuses on those characteristics of brain evolution and language that make us distinctive, and illustrates our most basic survival and reproductive mechanisms. Thiessen warns the reader that things are as they are no matter what we might wish; we ignore facts and controversy at our own risk. This book will be significant to anthropologists, psychologists, biologists, and sociologists.

Depression Jonathan Rottenberg 2021-11 "This chapter grapples with the challenges of defining depression, including challenges that arise from our imprecise use of language. Depression is at its core a kind of mood state. Mood states organize our minds and our bodies and motivate us to pursue goals. It is possible to understand depression by focusing on the scientific principles that explain why humans and other organisms have mood. A key goal is to become a more educated consumer of one's own mood and to understand the forces that operate on mood more generally. This framework can allow us to understand why people become depressed, why depression has occurred over human history, and why depression might be epidemic in some periods in human history, including the present day"--

Power, Sex, Suicide Nick Lane 2018-10-25 Mitochondria are tiny structures located inside our cells that carry out the essential task of producing energy for the cell. They are found in all complex living things, and in that sense, they are fundamental for driving complex life on the planet. But there is much

more to them than that. Mitochondria have their own DNA, with their own small collection of genes, separate from those in the cell nucleus. It is thought that they were once bacteria living independent lives. Their enslavement within the larger cell was a turning point in the evolution of life, enabling the development of complex organisms and, closely related, the origin of two sexes. Unlike the DNA in the nucleus, mitochondrial DNA is passed down exclusively (or almost exclusively) via the female line. That's why it has been used by some researchers to trace human ancestry daughter-to-mother, to 'Mitochondrial Eve'. Mitochondria give us important information about our evolutionary history. And that's not all. Mitochondrial genes mutate much faster than those in the nucleus because of the free radicals produced in their energy-generating role. This high mutation rate lies behind our ageing and certain congenital diseases. The latest research suggests that mitochondria play a key role in degenerative diseases such as cancer, through their involvement in precipitating cell suicide. Mitochondria, then, are pivotal in power, sex, and suicide. In this fascinating and thought-provoking book, Nick Lane brings together the latest research findings in this exciting field to show how our growing understanding of mitochondria is shedding light on how complex life evolved, why sex arose (why don't we just bud?), and why we age and die. This understanding is of fundamental importance, both in understanding how we and all other complex life came to be, but also in order to be able to control our own illnesses, and delay our degeneration and death. Oxford Landmark Science books are 'must-read' classics of modern science writing which have crystallized big ideas, and shaped the way we think.

The Evolution of Adam Peter Enns 2021-10-19 Can Christianity and evolution coexist? Traditional Christian teaching presents Jesus as reversing the effects of the fall of Adam. But an evolutionary view of human origins doesn't allow for a literal Adam, making evolution seemingly incompatible with what Genesis and the apostle Paul say about him. For Christians who both accept evolution and want to take the Bible seriously, this can present a faith-shaking tension. Popular Old Testament scholar Peter Enns offers a way forward by explaining how this tension is caused not by the discoveries of science but by false expectations about the biblical texts. In this 10th anniversary edition, Enns updates readers on developments in the historical Adam debate, helping them reconcile Genesis and Paul with current views on evolution and human origins. This edition includes an afterword that explains Enns's own theological evolution since the first edition released.