

Biology Guide Descent With Modification Answers

This is Charles Darwin's chronicle of his five-year journey, beginning in 1831, around the world as a naturalist on the H.M.S. Beagle.

The Reader's Guide to the History of Science looks at the literature of science in some 550 entries on individuals (Einstein), institutions and disciplines (Mathematics), general themes (Romantic Science) and central concepts (Paradigm and Fact). The history of science is construed widely to include the history of medicine and technology as is reflected in the range of disciplines from which the international team of 200 contributors are drawn.

Understanding the history and philosophy of biological systematics (phylogenetics, taxonomy and classification of living things) is key to successful practice of the discipline. In this thoroughly revised Third Edition of the classic Biological Systematics, Andrew V. Z. Brower and Randall T. Schuh provide an updated account of cladistic principles and techniques, emphasizing their empirical and epistemological clarity. Brower and Schuh cover: -the history and philosophy of systematics -the mechanics and methods of character analysis, phylogenetic inference, and evaluation of results -the practical application of systematic results to: -biological classification -adaptation and coevolution -biodiversity, and conservation -new chapters on species and molecular clocks Biological Systematics is both a textbook for students studying systematic biology and a desk reference for practicing systematists. Part explication of concepts and methods, part exploration of the underlying epistemology of systematics. This third edition addresses why some methods are more empirically sound than others.

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The Land of the Orang-utan and the Bird of Paradise

Reader's Guide to the History of Science

Campbell Biology in Focus, Loose-Leaf Edition

Evolutionary Philosophy

The Princeton Guide to Evolution

The Galapagos Islands

"Darwinism and war: science or religion? argues that the different perspectives of Christians and Darwinians on the nature and causes of warfare reveal them to be playing the same game, offering not so much scientific or empirical explanations but rival value-laden analyses, suggesting we have less a science-religion conflict and more one between two rival religious visions - Christianity and a form of secular Darwinian humanism"--

The guide offers clearly defined learning objectives, summaries of key concepts, references to Life and to the student Web/CD-ROM, and review and exam-style self-test questions with answers and explanations.

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.

Science and Faith Can—and Do—Support Each Other Science and Christianity are often presented as opposites, when in fact the order of the universe and the complexity of life powerfully testify to intelligent design. With this comprehensive resource that includes the latest research, you'll witness how the findings of scientists provide compelling reasons to acknowledge the mind and presence of a creator. Featuring more than 45 entries by top-caliber experts, you'll better understand... how scientific concepts like intelligent design are supported by evidence the scientific findings that support the history and accounts found in the Bible the biases that lead to scientific information being presented as a challenge—rather than a complement—to Christianity Whether you're looking for answers to your own questions or seeking to explain the case for intelligent design to others, The Comprehensive Guide to Science and Faith is an invaluable apologetic tool that will help you explore and analyze the relevant facts, research, and theories in light of biblical truth.

Lizards in an Evolutionary Tree

Volcanic Islands

Lab Investigations for Grades 9-12

Why Evolution Is True

The Voyage of the Beagle

A View from the National Academy of Sciences

Have you ever wondered what Charles Darwin would have had on his iPod? Or exactly how Cartman from South Park fits into the Theory of Evolution? The Rough Guide to Evolution delves into all of this and more, from the life and works of the eminent scientist to the impact of evolutionary thinking on modern times. Read about the evolutionary history of life on Earth, the stark evidence for

evolution - including feathered dinosaurs - and how Darwin's breakthrough is still denied by creationists, who have repeatedly tried to ban evolution from the classroom. Providing a complete and authoritative overview of one of the most controversial topics of our age, the guide is an accessible one-stop-shop for all things Darwinian, while listing resources for those keen to dig deeper into our murky beginnings. Find out exactly how Charles Darwin and The Origin of Species have affected human life in the 150 years since its publication - everything from Darwinian tourism to the evolution of The Simpsons - as well as some new angles that make The Rough Guide to Evolution a must-have for die-hard Darwin fans. Rediscover Darwin's earth-shattering explanation for the

diversity of life with The Rough Guide to Evolution.

This edition of Science and Creationism summarizes key aspects of several of the most important lines of evidence supporting evolution. It describes some of the positions taken by advocates of creation science and presents an analysis of these claims. This document lays out for a broader audience the case against presenting religious concepts in science classes. The document covers the

origin of the universe, Earth, and life; evidence supporting biological evolution; and human evolution. (Contains 31 references.) (CCM)

'There is grandeur in thsi view of life' Charles Darwin Charles Darwin's permanent legacy are his broad, abstract theories of evolution and natural selection, theories which he tested against an astonishing array of natural-history evidence in his writing. Mark Ridley uses a question-and-answer approach to explain how Darwin carefully tackled problems, and shows how the reader can

understand Darwin's arguments by first working out what question Darwin had implicitly set himself to answer. Mark Ridley concentrates on extracts from Darwin's two most important books, The Origin of Species and The Descent of Man, and also introduces us to Darwin's lesser-known works, on topics as diverse as animal domestication and earthworms, and his writing on the human condition.

This ebook is comprised of Hutton's 1788 paper 'Theory of the Earth', read before the Royal Society of Edinburgh, as well as Volumes 1 and 2 of his book of the same name. Although his books, filled with long quotes in French, make difficult reading, Hutton deserves to be better known as one of the makers of the modern view of the Earth.

Biological Systematics

Instructor's Guide to Text and Media [for] Essential Biology

Biology for AP® Courses

The Evolutionary Synthesis

Concepts of Biology

The Rough Guide to Evolution

How did life evolve on Earth? The answer to this question can help us understand our past and prepare for our future. Although evolution provides credible and reliable answers, polls show that many people turn away from science, seeking other explanations with which they are more comfortable. In the book Science, Evolution, and Creationism, a group of experts assembled by the National Academy of Sciences and the Institute of Medicine explain the fundamental methods of science, document the overwhelming evidence in support of biological evolution, and evaluate the alternative perspectives offered by advocates of various kinds of creationism, including "intelligent design." The book explores the many fascinating inquiries being pursued that put the science of evolution to work in preventing and treating human disease, developing new agricultural products, and fostering industrial innovations. The book also presents the scientific and legal reasons for not teaching creationist ideas in public school science classes. Mindful of school board battles and recent court decisions, Science, Evolution, and Creationism shows that science and religion should be viewed as different ways of understanding the world rather than as frameworks that are in conflict with each other and that the evidence for evolution can be fully compatible with religious faith. For educators, students, teachers, community leaders, legislators, policy makers, and parents who seek to understand the basis of evolutionary science, this publication will be an essential resource.

Biology was forged into a single, coherent science only within living memory. In this volume the thinkers responsible for the "modern synthesis" of evolutionary biology and genetics come together to analyze that remarkable event. In a new Preface, Ernst Mayr calls attention to the fact that scientists in different biological disciplines varied considerably in their degree of acceptance of Darwin's theories. Mayr shows us that these differences were played out in four separate periods: 1859 to 1899, 1900 to 1915, 1916 to 1936, and 1937 to 1947. He thus enables us to understand fully why the synthesis was necessary and why Darwin's original theory—that evolutionary change is due to the combination of variation and selection—is as solid at the end of the twentieth century as it was in 1859.

Less than 450 years ago, all European scholars believed that the Earth was at the centre of a Universe that was at most a few million miles in extent, and that the planets, sun, and stars all rotated around this centre. Less than 250 years ago, they believed that the Universe was createdessentially in its present state about 6000 years ago. Even less than 150 years ago, the view that living species were the result of special creation by God was still dominant. The recognition by Charles Darwin and Alfred Russel Wallace of the mechanism of evolution by natural selection hascompletely transformed our understanding of the living world, including our own origins. In this Very Short Introduction Brian and Deborah Charlesworth provide a clear and concise summary of the process of evolution by natural selection, and how natural selection gives rise to adaptations and eventually, over many generations, to new species. They introduce the central concepts of thefield of evolutionary biology, as they have developed since Darwin and Wallace on the subject, over 140 years ago, and discuss some of the remaining questions regarding processes. They highlight the wide range of evidence for evolution, and the importance of an evolutionary understanding forinstance in combating the rapid evolution of resistance by bacteria to antibiotics and of HIV to antiviral drugs. This reissue includes some key updates to the main text and a completely updated Further Reading section.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, andenthusiasm to make interesting and challenging topics highly readable.

For all the discussion in the media about creationism and 'Intelligent Design', virtually nothing has been said about the evidence in question - the evidence for evolution by natural selection. Yet, as this succinct and important book shows, that evidence is vast, varied, and magnificent, and drawn from many disparate fields of science. The very latest research is uncovering a stream of evidence revealing evolution in action - from the actual observation of a species splitting into two, to new fossil discoveries, to the deciphering of the evidence stored in our genome. Why Evolution is True weaves together the many threads of modern work in genetics, palaeontology, geology, molecular biology, anatomy, and development to demonstrate the 'indelible stamp' of the processes first proposed by Darwin. It is a crisp, lucid, and accessible statement that will leave no one with an open mind in any doubt about the truth of evolution.

The Morphological Construction and Ideological Reconstruction of Darwin's Theory

The Malay Archipelago

Your Inner Fish

The Beak of the Finch

Exploring the Ultimate Questions About Life and the Cosmos

Scientific Argumentation in Biology

This book makes Moore's wisdom available to students in a lively, richly illustrated account of the history and workings of life. Employing rhetoric strategies including case histories, hypotheses and deductions, and chronological narrative, it provides both a cultural history of biology and an introduction to the procedures and values of science.

Today many school students are shielded from one of the most important concepts in modern science: evolution. In engaging and conversational style, *Teaching About Evolution and the Nature of Science* provides a well-structured framework for understanding and teaching evolution. Written for teachers, parents, and community officials as well as scientists and educators, this book describes how evolution reveals both the great diversity and similarity among the Earth's organisms; it explores how scientists approach the question of evolution; and it illuminates the nature of science as a way of knowing about the natural world. In addition, the book provides answers to frequently asked questions to help readers understand many of the issues and misconceptions about evolution. The book includes sample activities for teaching about evolution and the nature of science. For example, the book includes activities that investigate fossil footprints and population growth that teachers of science can use to introduce principles of evolution. Background information, materials, and step-by-step presentations are provided for each activity. In addition, this volume: Presents the evidence for evolution, including how evolution can be observed today. Explains the nature of science through a variety of examples. Describes how science differs from other human endeavors and why evolution is one of the best avenues for helping students understand this distinction. Answers frequently asked questions about evolution. *Teaching About Evolution and the Nature of Science builds on the 1996 National Science Education Standards released by the National Research Council—and offers detailed guidance on how to evaluate and choose instructional materials that support the standards. Comprehensive and practical, this book brings one of today's educational challenges into focus in a balanced and reasoned discussion. It will be of special interest to teachers of science, school administrators, and interested members of the community.*

Winner of the Pulitzer Prize and the Los Angeles Times Book Prize On a desert island in the heart of the Galapagos archipelago, where Darwin received his first inklings of the theory of evolution, two scientists, Peter and Rosemary Grant, have spent twenty years proving that Darwin did not know the strength of his own theory. For among the finches of Daphne Major, natural selection is neither rare nor slow: it is taking place by the hour, and we can watch. In this dramatic story of groundbreaking scientific research, Jonathan Weiner follows these scientists as they watch Darwin's finches and come up with a new understanding of life itself. The Beak of the Finch is an elegantly written and compelling masterpiece of theory and explication in the tradition of Stephen Jay Gould. With a new preface:

A non-technical analysis of the controversial culture war over Darwin versus intelligent design states that there is no irrefutable evidence supporting Darwinism, argues that Darwin-based theories that are taught in school are not fact-based, and reveals how scientists at major universities believe in intelligent design. Original.

Darwin's Dangerous Idea

Ecology and Adaptive Radiation of Anoles

Life: The Science of Biology Study Guide

Plant Evolution

Argument-driven Inquiry in Biology

Natural Selection

A fascinating chronicle of the evolution of humankind traces the genetic history of the organs of the human body, offering a revealing correlation between the distant past and present-day human anatomy and physiology, behavior, illness, and DNA. Reprint. 75,000 first printing.

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

Are you interested in using argument-driven inquiry for high school lab instruction but just aren't sure how to do it? You aren't alone. This book will provide you with both the information and instructional materials you need to start using this method right away. Argument-Driven Inquiry in Biology is a one-stop source of expertise, advice, and investigations. The book is broken into two basic parts: 1. An introduction to the stages of argument-driven inquiry—from question identification, data analysis, and argument development and evaluation to double-blind peer review. 2. A well-organized series of 27 field-tested labs that cover molecules and organisms, ecosystems, heredity, and biological evolution. The investigations are designed to be more authentic scientific experiences than traditional laboratory activities. They give your students an opportunity to design their own methods, develop models, collect and analyze data, generate arguments, and critique claims and evidence. Because the authors are veteran teachers, they designed Argument-Driven Inquiry in Biology to be easy to use and aligned with today's standards. The labs include reproducible student pages and teacher notes. The investigations will help your students learn the core ideas, crosscutting concepts, and scientific practices found in the Next Generation Science Standards. In addition, they offer ways for students to develop the disciplinary skills outlined in the Common Core State Standards. Many of today's teachers—like you—want to find new ways to engage students in scientific practices and help students learn more from lab activities. Argument-Driven Inquiry in Biology does all of this in a great way as it gives students the chance to practice reading, writing, speaking, and using math in the context of science.

"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 extended 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

A Journey Into the 3.5-Billion-Year History of the Human Body

The Comprehensive Guide to Science and Faith

Perspectives on the Unification of Biology

The Problem of War

Principles and Applications

Evolution and the Meaning of Life

Biology for AP® courses covers the scope and sequence requirements of a typical two-semester Advanced Placement® biology course. The text provides comprehensive coverage of foundational research and core biology concepts through an evolutionary lens. Biology for AP® Courses was designed to meet and exceed the requirements of the College Board's AP® Biology framework while allowing significant flexibility for instructors. Each section of the book includes an introduction based on the AP® curriculum and includes rich features that engage students in scientific practice and AP® test preparation; it also highlights careers and research opportunities in biological sciences.

In a book that is both groundbreaking and accessible, Daniel C. Dennett, whom Chet Raymo of The Boston Globe calls "one of the most provocative thinkers on the planet," focuses his unerringly logical mind on the theory of natural selection, showing how Darwin's great idea transforms and illuminates our traditional view of humanity's place in the universe. Dennett vividly describes the theory itself and then extends Darwin's vision with impeccable arguments to their often surprising conclusions, challenging the views of some of the most famous scientists of our day.

Like three guides in one, Scientific Argumentation in Biology combines theory, practice, and biological content. This thought-provoking book starts by giving you solid background in why students need to be able to go beyond expressing mere opinions when making research-related biology claims. Then it provides 30 field-tested activities your students can use when learning to propose, support, and evaluate claims; validate or refute them on the basis of scientific reasoning; and craft complex written arguments. Detailed teacher notes suggest specific ways to use the activities to enrich and supplement (not replace) what you're doing in class already. You'll find Scientific Argumentation to be an ideal way to help your students learn standards-based content, improve their practices, and develop scientific habits of mind.

NOTE: The loose-leaf version of the text has the flexibility to take your own notes -- all an affordable price. For loose-leaf editions that include MyLab(tm) or Mastering(tm), several versions may exist for each title and registrations are not transferable. You may need a Course ID, provided by your instructor, to register for and use MyLab or Mastering products. For introductory biology course for science majors Focus.

Practice. Engage. Built unit-by-unit, Campbell Biology in Focus achieves a balance between breadth and depth of concepts to move students away from memorization. Streamlined content enables students to prioritize essential biology content, concepts, and scientific skills that are needed to develop conceptual understanding and an ability to apply their knowledge in future courses. Every unit uses an approach to streamlining the material to best fit the needs of instructors and students, based on reviews of over 1,000 syllabi from across the country, surveys, curriculum initiatives, reviews, discussions with hundreds of biology professors, and the Vision and Change in Undergraduate Biology Education report. Maintaining the Campbell hallmark standards of accuracy, clarity, and pedagogical innovation, the 3rd Edition builds on this foundation to help students make connections across chapters, interpret real data, and synthesize their knowledge. The new edition integrates new, key scientific findings throughout and offers more than 400 videos and animations in Mastering Biology and embedded in the new Pearson eText to help students actively learn, retain tough course concepts, and successfully engage with their studies and assessments. Also available with Mastering Biology By combining trusted author content with digital tools and a flexible platform, Mastering personalizes the learning experience and improves results for each student. Integrate dynamic content and tools with Mastering Biology and enable students to practice, build skills, and apply their knowledge. Built for, and directly tied to the text, Mastering Biology enables an extension of learning, allowing students a platform to practice, learn, and apply outside of the classroom. Note: You are purchasing a standalone product; Mastering Biology does not come packaged with this content. Students, if interested in purchasing this title with Mastering Biology ask your instructor for the correct package ISBN and Course ID. Instructors, contact your Pearson representative for more information. If you would like to purchase both the loose-leaf version of the text and Mastering Biology search for: 0134988361 / 9780134988368 Campbell Biology in Focus, Loose-Leaf Plus Mastering Biology with Pearson eText -- Access Card Package Package consists of: 013489572X / 9780134895727 Campbell Biology in Focus, Loose-Leaf Edition 013487451X / 9780134874517 Mastering Biology with Pearson eText -- ValuePack Access Card -- for Campbell Biology in Focus

The Global Struggle for Existence

The Meaning of Evolution

Theory of the Earth

Evolution: a Very Short Introduction

A Guide to Biology with Physiology

An Introduction to the History of Life

The preparation of the series of works published under the general title "Geology of the Voyage of the 'Beagle'" occupied a great part of Darwin's time during the ten years that followed his return to England. The second volume of the series, entitled "Geological Observations on Volcanic Islands, with Brief Notices on the Geology of Australia and the Cape of Good Hope," made its appearance in 1844. The materials for this volume were collected in part during the outward voyage, when the "Beagle" called at St. Jago in the Cape de Verde Islands, and St. Paul's Rocks, and at Fernando Noronha, but mainly during the homeward cruise; then it was that the Galapagos Islands were surveyed, the Low Archipelago passed through, and Tahiti visited; after making calls at the Bay of Islands, in New Zealand, and also at Sydney, Hobart Town and King George's Sound in Australia, the "Beagle" sailed across the Indian Ocean to the little group of the Keeling or Cocos Islands, which Darwin has rendered famous by his observations, and thence to Mauritius; calling at the Cape of Good Hope on her way, the ship then proceeded successively to St. Helena and Ascension, and revisited the Cape de Verde Islands before finally reaching England.Although Darwin was thus able to gratify his curiosity

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 in modern society

From the front of the classroom to the top of the bestseller's list, award-winning educator Jay Pzelan knows how to tell the story of how scientists investigate the big questions about life. He is also a master at using science as a springboard for developing the critical thinking skills and scientific literacy that are essential to students through college and throughout their lives.

Did Darwin see evolution as progressive, directed toward producing ever more advanced forms of life? Most contemporary scholars say no. In this challenge to big prevailing views, Robert J. Richards says yes!and argues that current perspectives on Darwin and his theory are both ideologically motivated and scientifically unsound. This provocative new reading of Darwin goes directly to the origins of evolutionary theory. Unlike most contemporary biologists or historians and philosophers of science, Richards holds that Darwin did concern himself with the idea of progress, or telos, as he constructed his theory. Richards maintains that Darwin drew on the traditional embryological meanings of the terms "evolution" and "descent with modification." In the 1600s and 1700s, "evolution" referred to the embryological theory of preformation, the idea that the embryo exists as a miniature adult of its own species that simply grows, or evolves, during gestation. By the early 1800s, however, the idea of preformation had become the concept of evolutionary recapitulation, the idea that during its development an embryo passes through a series of stages, each the adult form of an ancestor species. Richards demonstrates that, for Darwin, embryological recapitulation provided a graphic model of how species evolve. If an embryo could be seen as successively taking the structures and forms of its ancestral species, then one could see the evolution of life itself as a succession of species, each transformed from its ancestor. Richards works with the Origin and other published and archival material to show that these embryological models were much on Darwin's mind as he considered the evidence for descent with modification. Why do so many modern researchers find these embryological roots of Darwin's theory so problematic? Richards argues that the current tendency to see evolution as a process that is not progressive and not teleological imposes perspectives on Darwin that incorrectly deny the clearly progressive heart of his embryological models and his evolutionary theory.

How To Read Darwin

The Foundations of Modern Biology

Science as a Way of Knowing

Campbell Biology

Loose-leaf Version for What is Life? A Guide to Biology with Physiology

A Story of Evolution in Our Time