

Understanding Charles Darwin

The legend of Charles Darwin has never been more alive or more potent, but by virtue of this, his legacy has become susceptible to myths and misunderstandings.

Understanding Charles Darwin examines key questions such as: What did Darwin's work change about the world? In what ways is "Darwinism" reflective of Darwin's own views? What problems were left unsolved? In our elevation of Darwin to this iconic status, have we neglected to recognize the work of other scientists? The book also examines Darwin's struggle with his religious beliefs, considering his findings, and whether he was truly an atheist.

In this engaging account, Peterson paints an intimate portrait of Darwin from his own words in private correspondence and journals. The result is the Darwin you never knew.

Erik L. Peterson is an award-winning Professor of the History of Science and Medicine at the University of Alabama (USA), and a co-host of the podcast "Speaking of Race." Erik researches the conceptual foundations of genetics, evolutionary biology, and anthropology, and is especially interested in the persistence of race science. His book, *The Life Organic: The Theoretical Biology Club and the Roots of Epigenetics* (2017), told the forgotten story of British scientists who discovered epigenetics before the Second World War – 70 years before it revolutionized American biology. He also co-authored *A Deeper Sickness* (2022), a daily history of 2020, which critics have called "harrowing" and a call for a "national reckoning."

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Erik L. Peterson

Frontmatter

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The ***Understanding Life*** series is for anyone wanting an engaging and concise way into a key biological topic. Offering a multidisciplinary perspective, these accessible guides address common misconceptions and misunderstandings in a thoughtful way to help stimulate debate and encourage a more in-depth understanding. Written by leading thinkers in each field, these books are for anyone wanting an expert overview that will enable clearer thinking on each topic.

Series Editor: Kostas Kampourakis <http://kampourakis.com>

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remain, accurate or appropriate.

“Erik Peterson’s book on Charles Darwin introduces us to Darwin the scientist, Darwin the family man, Darwin the silicone-rich member of British upper-middle-class society, at a time when the Empire was at its peak. Never before have I got to know Charles Darwin more intimately and fully; never before did I realize that such knowledge is absolutely vital to understand the revolution associated with Darwin’s name. Highly recommended.”

Michael Ruse, University of Guelph, Ontario,
and Florida State University

“Erik Peterson has given us a fresh, deeply informed, and engaging portrait of Darwin and his revolutionary scientific achievements. Peterson also succeeds admirably in placing Darwin in historical context, both within British society and among his gentlemanly scientific peers. At the same time, this eminently readable account dispels a series of myths and misunderstandings about Darwin’s thinking and influence. Of special interest is Peterson’s masterful account of Alfred Russel Wallace’s independent discovery of the theory of natural selection, together with the various ways that Darwin and Wallace differed in their evolutionary thinking. Altogether, a captivating and richly informative read.”

Frank J. Sulloway, University of California, Berkeley

“This well-written volume unpacks a host of misunderstandings about Darwin. In attacking the pedestal that many twentieth-century biologists erected, Peterson provides a more balanced view of Darwin while also highlighting commonly overlooked contributions from others. The Captain of the *Beagle*, Robert FitzRoy, has been portrayed as a Bible-thumping creationist arguing against Darwin’s revolutionary insight, but Peterson re-emphasizes how FitzRoy helped stimulate adaptive explanations. The ornithologist John Gould, if he is mentioned at all, is termed Darwin’s bird identifier, but Peterson points out that it was Gould, not Darwin, who focused on the significance of the Galapagos beaks. And Peterson’s own detailed research on the history of eugenics makes him the perfect foil for the myth that the Holocaust grew out of Darwin’s theory. If you want to see Darwin, warts and all, this book takes you there.”

Jim Bindon, The University of Alabama

“In this delightful book, Erik Peterson explodes numerous fairytales about Darwin’s life and influence. Amongst these is the fiction that Darwin was a solitary genius. Peterson’s corrective is a story alive with numerous people, many of them now forgotten, who played diverse roles in making Darwin the man he was. Peterson’s prose sparkles; it is conversational and engaging.”

Elliott Sober, University of Wisconsin–Madison

“This crisp account of Darwin, warts and all, shows him finding his distinctive voice among earlier evolutionists, including his grandfather Erasmus, standing his ground between friends who would pull him toward creationism and others who would push him toward atheism, and after his death recruited to this day for a host of dubious causes. Built on thorough knowledge of the extensive archival material and current scholarship, *Understanding Charles Darwin* will be an eye-opener for students and scholars alike.”

David Depew, University of Iowa

“What do we really know about Charles Darwin, *the man*? In this engaging account, Peterson uncovers the *true* story behind one of history’s most iconic and mythologized scientists. *Understanding Charles Darwin* dismantles several misunderstandings lodged into our collective consciousness, resulting from what Peterson terms ‘the Darwin industry.’”

Iris Clever, University of Chicago

To my twigs, G & W: resist working for the clampdown

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Foreword

Another book on Charles Darwin? Yes, and very different than anything you have previously read about him. In this fabulous book, Erik Peterson simultaneously fulfills two tasks with success. The first is to address some common misunderstandings about Charles Darwin, someone most people have heard of without reading what he had to say. Peterson takes us on an insightful journey through Darwin's writings to reveal what he actually thought about evolution, heredity, race, religion, and a lot more. But Peterson's success depends also on the second of the tasks he successfully fulfills: the clearest and richest presentation of Darwin's own influences and background, which were crucial for the development of his theory. Erasmus Darwin, Robert Grant, Harriet Martineau, Alfred Russel Wallace, and many others come splendidly alive in Peterson's book, which helps us better understand why, how, and when Darwin developed his theory. What we get in the end is a rewarding, authentic picture of one of science's "greatest heroes." Read this book and your understanding of who Charles Darwin was and what he did will never be the same again; it will be as clear and accurate as it could be. Erik Peterson has produced a gem that ought to be read widely and celebrated as a great achievement.

Kostas Kampourakis, Series Editor

Acknowledgments

Any Darwin book enters a crowded forest. Many thanks to the stately oaks of Darwiniana who, through their time, talent, effort, and wisdom, let this sapling share a spot of sunlight: Janet Browne, Greg Radick, Marsha Richmond, Michael Ruse, Phillip R. Sloan, Frank Sulloway, and John van Wyhe. Archivists at Cambridge University Library, the British Library, and the Wellcome Institute assisted immensely with preparing the ground. Kostas Kampourakis patiently cultivated the project from mere seedlings. Brant Cook, Brian Estabrook, and L. J. Weaver stripped dead wood from early drafts. At Cambridge University Press, Olivia Boulton, Jess Papworth, Aleksandra Serocka, Jenny van der Meijden, skilled copy editor Lindsay Nightingale, and the entire production team expertly pruned and cared for this tree. Broken branches of interpretation, stubborn acorns of attribution, and garbled arboreal metaphors are almost certainly my fault.