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978-1-107-02701-5 - Evolutionary Biology: Conceptual, Ethical, and Religious Issues

Edited by R. Paul Thompson and Denis Walsh

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## EVOLUTIONARY BIOLOGY

Evolution – both the fact that it occurred and the theory describing the mechanisms by which it occurred – is an intrinsic and central component in modern biology. Theodosius Dobzhansky captures this well in the much-quoted title of his 1973 paper, “Nothing in biology makes sense except in the light of evolution.” The correctness of this assertion is even more obvious today: philosophers of biology and biologists agree that the fact of evolution is undeniable, and that the theory of evolution explains that fact. Such a theory has far-reaching implications. In this volume, twelve distinguished scholars address the conceptual, metaphysical, and epistemological richness of the theory and its ethical and religious impact, exploring topics including DNA barcoding, three grand challenges of human evolution, teleology, historicity, design, evolution and development, and religion and secular humanism. The volume will be of great interest to those studying philosophy of biology and evolutionary biology.

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# EVOLUTIONARY BIOLOGY

*Conceptual, Ethical, and Religious Issues*

EDITED BY

R. PAUL THOMPSON

*University of Toronto*

and

DENIS WALSH

*University of Toronto*



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*For Michael Edward Ruse*

*Intellectual pioneer, a founder of modern philosophy of biology,  
dedicated student mentor and a warm supportive friend to many*

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Evolutionary theory has a complex and fascinating history, and it is conceptually and theoretically rich. Hence, it is not surprising that historians, philosophers, and biologists have mined the rich veins of gold it contains. As this volume demonstrates there is considerable gold left to be unearthed.

There is a worthy tradition of thanking those who, directly or indirectly, have had an impact on a volume. Our list is too extensive to make specific mention practicable. Those that have contributed chapters have, obviously, had a crucial impact on its quality and relevance. Those who provided helpful comments on the proposal and the text have improved the final result. We would like to acknowledge the serious health issues that prevented Elisabeth Lloyd and Robert Brandon from submitting chapters. The staff of Cambridge University Press have made important contributions to the accuracy, readability, and style of the volume: Hilary Gaskin (editor), Emma Walker and Anna Lowe, in particular. Also, many thanks to Sylvia Nickerson for the artwork in Chapter 9, Fermin Fulda for compiling the index, and Alison Evans of Out of House Publishing. Those who know our spouses, Jennifer McShane and Deborah Kohn, are familiar with their constant support and encouragement; for others we acknowledge here their support and endurance. Although having no specific hand in this volume, always lurking in the background is the indefatigable Michael Ruse.