

BOOK REVIEW

***The Rise and Fall of the Dinosaurs – A New History of a Lost World.* S. Brusatte. 2018. William Morrow Harper Collins, New York, NY. 404 pp.**

I was planting trees in northern Ontario the first time I read “Wonderful Life” by Stephen Jay Gould (1989). Exhausted from the intense work of tree-planting, I spent my evenings reading to avoid the swarms of mosquitoes that hummed outside my tent. Gould’s book captivated my imagination, and inspired me to learn more about deep time, evolution, natural history, and to recognize the importance of the history of science.

Gould was a prolific and masterful writer. He described ‘his writing style recipe’ in the preface of his penultimate volume of essays (Gould 2000, pp. 4), “*to encapsulate, in the unforgiving form of an essay, the essence of both a person (as expressed in the controlling idea of his scientific life) and a concept (through the quintessentially human device of displaying its development in an individual life)*”. It was this linkage of scientific concepts and biographies of real people that struggled with real questions that inspired me (and many others) to study and pursue research in natural sciences.

Today, I find a similar linkage of science and biography in Steve Brusatte’s new book, the *Rise and Fall of the Dinosaurs - A New History of a Lost World*. This engaging and accessible book provides personal stories of discovery and collaboration that Brusatte has shared with the current generation of dinosaur paleontologists around world.

This *New History of a Lost World* provides a summary of our current knowledge of dinosaur biology and evolution, as well as the stories of hardship and discovery of the people behind the science. It includes stories of recent graduate students conducting research projects that continue to open new chapters of evolution’s grand narrative, and stories of international collaborations and modern technology applied to ancient dinosaur fossils.

By its nature, paleontology is a strongly historical science. After being discovered and collected, fossil specimens are carefully stored in museums to be examined by new researchers and modern approaches. Brusatte conveys the important relationship between modern discoveries and the history of science, tracing the understanding of dinosaurs through time. At the same time, he conveys

how modern students and researchers continue to shine light on an ancient lost world in exciting new ways.

In my own research, I've had the great pleasure to meet and work with several of the inspiring people mentioned in this book. I can attest to the excitement and intensity of the "Rat Pack" of new scientists such as Sterling Nesbitt and Jessica Whiteside, while working with Paul Olsen in the Bay of Fundy. This new generation of researchers continue to make exciting new discoveries.

Brusatte is an accomplished public science writer. His experiences writing articles for *Scientific America* and online sources provide him with a clear and compelling style. If you are interested in glimpsing into the culture of dinosaur research, what it's like to discover new species in exotic places around the globe, this book is for you. If you are an undergraduate student, this book may inspire you to come up with your own questions and conduct your own research projects.

For those so inspired, I also recommend reading the Notes of the book. Brusatte provides a running summary and suggestions for additional reading for the topics of dinosaur science discussed. These notes also provide another layer in which to see the weaving of personal biographies and burning questions that have inspired and challenged the scientists.

Stating the obvious, dinosaurs remain a hugely popular topic. We cannot seem to learn enough about these 'terrible lizards' of the ancient past. Engaging and effective popular science writing is surely one of the reasons for the growing interest in dinosaur paleontology. Books like those written by Stephen Jay Gould and Steve Brusatte convey the human interest and struggle that continues in new scientific research. Thankfully, one might predict that a new generation of scientists, including paleontologists, will be inspired by this new dawn of popular science writing.

REFERENCES

- Gould, S.J.** (1989). *Wonderful Life. The Burgess Shale and the Nature of History.* Hutchinson Radius, London, UK. 347 p.
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