



Michael Hannah: Extinctions—living and dying in the margin of error

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In his book “Extinctions”, paleontologist Michael Hannah sheds new light on the past five mass extinctions, which are often used as an argument to downplay the scale of the current extinction rates. Throughout nine chapters, he guides the reader through the history of life on Earth, focusing on causes and consequences of mass extinction events. The book begins with a general introduction to the Anthropocene and the significance that this proposed geological epoch would have. Hannah then introduces the reader to how geologists reconstruct life histories using fossil records and the concept of deep time. He dedicates two chapters to providing a general overview of the origin of animals and of the main scientific approaches to describing ancient biodiversity, along with their challenges. This is followed by an explanation of the basics of mass extinction events and their causes, and of the mechanisms that allowed biodiversity to rebound and even increase significantly after mass extinction events. In the last two chapters, he discusses the causes of megafaunal extinctions and draws worrying parallels to the current biodiversity loss. Each chapter is thoroughly supported by paleontological data, neatly visualized, and filled

with vivid recollections of field trips and anecdotes. “Extinctions” is a fascinating story of the development of life on Earth that puts the current biodiversity loss into perspective without trivializing it. On the contrary, Hannah illustrates the urgency of actively shaping the future of biodiversity on Earth by helping the reader investigate the past. Due to the highly detailed excursions into geological work and the foundations of paleontological research, readers outside the paleontological community may find it a little lengthy at times. However, this is more than made up for by the unsettling conclusions drawn from exploring deep time and our current situation. The illustrations are well chosen and help the reader not to get lost in timescales and descriptions. Despite the sobering topic, Hannah’s storytelling is exceedingly pleasant and never feels dry or moralizing. Overall, “Extinctions” offers the reader a fascinating perspective on biodiversity losses and a renewed sense of urgency regarding the ongoing biodiversity crisis.

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