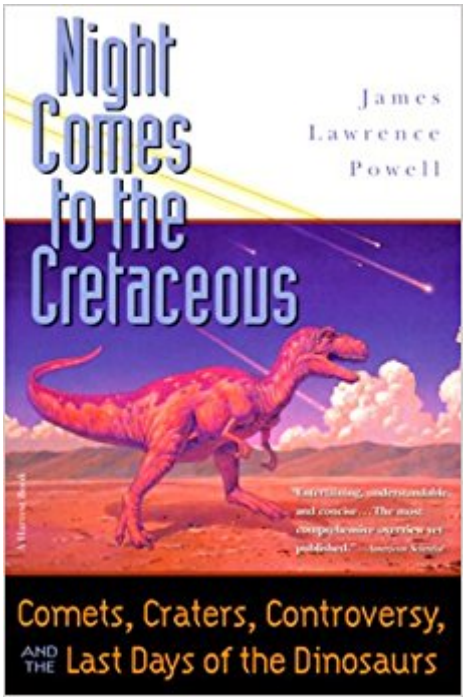
Night Comes To The Cretaceous: Comets, Craters, Controversy, And The Last Days Of The Dinosaurs



Synopsis

What killed the dinosaurs? For more than a century, this question has been one of the greatest unsolved mysteries in science. But, in 1980, Nobel Prize-winning physicist Luis Alvarez and his son, Walter, proposed a radical answer: 65 million years ago an asteroid or comet as big as Mt. Everest slammed into the earth, raising a dust cloud vast enough to cause mass extinction. A revolutionary idea that challenged the ice-age extinction theory, the asteroid-impact theory was scorned and derided by the science community. But after years of bitter debate and intense research, an astonishing discovery was made-an immense impact crater in the YucatÃƒÂ¡n Peninsula that was identified as Ground Zero. The Alvarezes had their proof. A dramatic scientific detective story, Night Comes to the Cretaceous is a brilliant example of science at work-in the trenches, complete with passionate struggles and occasional victories.

Book Information

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Customer Reviews

Powell is the director of the Los Angeles County Museum of Natural History, and taught geology at Oberlin College for 20 years. In 1980, a physicist father and his geologist son rocked the scientific world by their proposed theory that dinosaurs became extinct because of an impact by an asteroid or comet. Powell recounts the bitter debates over Luis and Walter Alvarez's idea and years of intense research that followed, culminating in the discovery of a gigantic crater deeply buried in the Yucatan Peninsula, which seemed to prove the probability that science and evolution are punctuated by random events. The author's presentation of the dramatic events surrounding the

controversy, the bitter refutations, and, finally, acceptance of the Alvarez theory is fascinating by itself. But Powell also examines the equally interesting factors that inhibit science from making paradigm shifts. Some formulas and terminology are designed for specialists in the field, but the overall content here is geared to general readers and is utterly engrossing. [Interested readers may also want Walter Alvarez's own account, T. Rex and the Crater of Doom, LJ 6/15/97.?Ed.]?Gloria Maxwell, Kansas City P.L., M.-?Gloria Maxwell, Kansas City P.L., MOCopyright 1998 Reed Business Information, Inc. --This text refers to an out of print or unavailable edition of this title.

Powell lays out persuasively the evidence that has accumulated to give force to the Alvarez theory. He also maintains that the impact theory has transformed geology. --This text refers to an out of print or unavailable edition of this title.

What caused the great terminal Cretaceous extinction of both land and sea species, including the dinosaurs? Does the huge crater buried under half a mile of sedimentary rock on the YucatÃƒÂ¡n Peninsula have anything to do with the demise of Tyrannosaurus Rex, along with seventy percent of all species that were alive during the last days of its reign?Ã¢â ¬Å“Night Comes to the CretaceousÃ¢â ¬Â• answers both questions, the latter with an emphatic Ã¢â ¬Ëœeyes!Ã¢â ¬â„¢ The Chicxulub (which means either Ã¢â ¬Ëœred devilÃ¢â ¬â„¢ or Ã¢â ¬Ëœplace of the cuckoldÃ¢â ¬â„¢ in Mayan) impact crater, first reported (and ignored for a decade) at the 1981 annual meeting of the Society of Exploration Geophysicists, appears to exactly the right age and the right size to have terminated most of the life on Earth, sixty-five million years ago.This fascinating book by geologist James Lawrence Powell is the first lÃ¢â ¬â„¢d read on the subject of mass extinctions since Ã¢â ¬Å“ExtinctionÃ¢â ¬Â• by Steven M. Stanley, published in 1987. What a difference two decades of discoveries made! Stanley, although aware of the discovery of the iridium concentrations at the K-T (Cretaceous-Tertiary) boundary, concluded that global climatic change rather than extraterrestrial catastrophe caused mass extinctions. Chicxulub was not on his event horizon, so he produced a very detailed and convincing argument for what was then the orthodox theory of extinction.Unfortunately for orthodoxy, Nobel Prize-winning physicist Luis Alvarez and his son, geologist Walter Alvarez had already discovered the asteroid-impact iridium layer in 1980, and predicted the discovery of Chicxulub as the death-knell of the dinosaurs.Powell in Ã¢â ¬Å“Night Comes to the CretaceousÃ¢â ¬Â• details many more discoveries that supported the Alvarez theory of extinction, and changed the way scientists (and the rest of us) look at the night sky. His book provides a comprehensive overview of all the bits and pieces of the dinosaur extinction puzzle that I

had been reading about in two decades of science magazines. It is really exciting to see the whole picture and the new orthodoxy as of 1998.Furthermore, in the last few chapters of his book, Powell asks whether all mass extinctions on Earth were caused by asteroid/comet impacts. He lists the seven known mass extinctions and presents the impact evidence for each. Finally he discusses the theory that cratering and extinctions may be regularly spaced through time.Ã¢â ¬ËœNightÃ¢â ¬â„¢ is pretty scary reading if you had planned to go out with a whimper, not a bang.

The value of this book is that it explains how science really works. It’s not guys in white smocks boiling stuff in beaker, which many people don’t realize. The book presents the reality of science in very understandable and readable way. It should be required reading for every high school student. ...and, it does a great job of explaining the impact theory of extinction episodes.

Must read for anyone interested in the problematics of asteroids, impacts and K-Pg extinction.

It was a good book. The author provided several views on the controversies condensed among a number of Scientists and Geologist. The only drawback I found is, the book repeats itself throughout.

One of the great scientific revolutions of our times has been the recognition that the biological evolution of Earth is influenced random impacts by comets and asteroids. When this concept was put forward in 1980, it was radical; today it is the accepted wisdom in paleontology, geology, and evolutionary biology. Jim Powell tells a fascinating story of the evidence for this transformation and of the scientists who have been protgonists in the struggle to understand this evidence and integrate it into our broader undestanding of our planet. This is one of the best books ever written to trace the history of a scientific controversy and of the people involved, warts and all.

Had to buy in conjunction with a college course (which actually turned out to be pretty interesting). Not a bad read.

I was hoping for a balanced analysis supporting the dinosaur extinctions via an asteroid doing a number on mother earth. Instead I got a steady dose of denunciations towards anyone who disagreed with the asteroid theory. The tone is palatable at first but after a while repeating the same canard over and over does tend to get tiresome. Around page 170 or so I realized that I was reading

an apologist for the asteroid theory.I was very disappointed that other theories were given short shrift and at times almost mocked. This is a so so book about dinosaur extinctions but I am waiting for a truly meaty and balanced book.

Night Comes to the Cretaceous: Comets, Craters, Controversy, and the Last Days of the Dinosaurs The Complete Book of Dinosaurs: The ultimate reference to 355 dinosaurs from the Triassic, Jurassic and Cretaceous periods, including more than 900 illustrations, maps, timelines and photographs After the Dinosaurs Box Set: After the Dinosaurs, Beyond the Dinosaurs, The Day the Dinosaurs Died (I Can Read Level 2) Fun with Cretaceous Dinosaurs Stencils (Dover Stencils) Dinosaurs! Learn About Dinosaurs and Enjoy Colorful Pictures - Look and Learn! (50+ Photos of Dinosaurs) Asteroids and Comets (Extreme Threats) Exodus to Arthur: Catastrophic Encounters with Comets Bittersweet Farm 5: Calling All Comets Aerial Geology: A High-Altitude Tour of North AmericaÃ¢â ¬â„¢s Spectacular Volcanoes, Canyons, Glaciers, Lakes, Craters, and Peaks Meteorite Craters Meteorite Hunter: The Search for Siberian Meteorite Craters Central Idaho: Boise, Stanley, Challis, River of No Return, Pocatello, Craters of the Moon, Sawtooth, Oregon Trail (Travel Adventures) First Comes Love, then Comes Malaria: How a Peace Corps Poster Boy Won My Heart and a Third World Adventure Changed My Life Your Story Hour Bible Comes Alive Series (Bible Comes Alive, 1) First Comes Love (First Comes Love Series Book 1) Ancient Earth Journal: The Early Cretaceous: Notes, drawings, and observations from prehistory The Cretaceous Ammonities of Venezuela Treatise on Invertebrate Paleontology, Part L, Mollusca 4, vol. 4 Cretaceous Ammonoidea: Mollusca 4, Cephalopoda : Ammonoidea What the Dinosaurs Did Last Night Dinosaurs and Prehistoric Creatures (Dinosaurs and Prehistoric Creatures / Dino of Land, Sea, Air)