1. Record Nr. UNINA9910825240403321 Autore Snook Jim <1933-> Titolo Ice age extinction: cause and human consequences // Jim Snook Pubbl/distr/stampa New York, : Algora Pub., 2008 **ISBN** 1-281-39837-3 9786611398378 0-87586-559-3 Edizione [1st ed.] Descrizione fisica xiv, 191 p.: ill., maps Disciplina 576.8/4 Soggetti Extinction (Biology) Glacial epoch Climatic changes - Environmental aspects Atmospheric carbon dioxide - Physiological effect Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di bibliografia Includes bibliographical references and indexes. Nota di contenuto Intro -- Acknowledgements -- Maps and Diagrams -- Preface --Chapter 1. Introduction -- The Last Extinction Compared to Other Times of Extinction -- How the Last Extinction Relates to the Ice Age --Life Changes near the End of the Last Ice Age -- Background Data --Low Atmospheric Carbon Dioxide Effect -- Looking Ahead -- Chapter 2. Transitions Relating to Extinction -- Exposed Land -- Greatest Glacial Extent -- Changing Plant Distribution and Character -- Woolly Mammoth and Relatives -- Large Animal Distribution -- Chapter 3. Extinction -- Melting of the Continental Glaciers -- Large Animal Extinction -- Loess and Sand Dune Deposits -- Dust and Sand Storm Effects on Animals and Humans -- Chapter 4. How the Glacial Cycle Works -- Heat Cycles -- Energy for the Glacial Cycle -- How Heat is Utilized on Earth -- How a Glacier Works -- Types of Glaciers --Idealized 100,000 Year Glacial Cycle -- Interglacial Period --Accumulation Phase -- Background Information for Full Data Diagram -- Dormant Phase -- Active Phase -- Glacial Breakup Phase -- Chapter

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Attitude Changes with Increased Atmospheric Carbon Dioxide and Population -- Chapter 13. The Way We Are and Where We are Heading -- Where We Are Today -- Where We are Heading -- Historic Data and Future Projections -- Sometimes People Can be an Arrogant Lot -- Chapter 14. The Future -- Life in the Age of Declining Fossil Fuels -- Life in a Time of Declining and Aging Population -- Life After the End of the Fossil Fuels -- Life in the Age of Declining Atmospheric Carbon Dioxide -- Life in the Coming Glacial Cycle -- Conclusion -- Sources -- Index of Names -- Index of Subjects.

Sommario/riassunto

Global warming seen from the other side: by the end of the last ice age, the earth had lost most of its large animal species and most of its humans. In a novel approach the author argues that the main cause of this catastrophic extinction was a drastic reduction in atmospheric carbon dioxide, due to the long period of cold, and he backs up his theory with scientific explanations given in clear language for the general reader. The author explores the causes of Earth's cyclical temperature changes and shows how those temperature shifts touch off a chain of events in the atmosphere, in the oceans and on land. Cold temperature was the trigger; and the resultant reduction in carbon dioxide, he argues, was the bullet that killed off so many species. The re-warming released more carbon dioxide into the atmosphere and

fueled a resurgence which we are still enjoying. In addition, the author describes the human responses to increases in atmospheric carbon dioxide after the last ice age and in the last 150 years. Near the end of the last ice age, atmospheric carbon dioxide was about half of what it is today. Due to the lack of carbon dioxide, most of the vegetation disappeared from the middle and high latitudes. Without plants to eat, many large animals became extinct; North America lost three-fourths of its large animals including the woolly mammoth, mastodon, and saber tooth cat. Humans, too, had little to eat in these areas and their population declined dramatically. The book then explains how and why atmospheric carbon dioxide increased by about 50% after the last ice age ended, encouraging a population explosion among plants, animals and humans, all of which then migrated into many previously barren areas. More recently, the 28% increase in atmospheric carbon dioxide in the last 150 years has caused a six-fold increase in the human population. Changes

in the next 300 years will reverse some of the current trends. There have been some books on the causes of extinction over the last forty years, but all looked at other causes and none examined the role of low atmospheric carbon dioxide. This book has value for anyone interested in the ice age extinction; glaciers; the glacial cycle; the atmosphere and oceans; the past and future of plants, animals, and humans. It provides long-term information on atmospheric carbon dioxide, global warming and cooling.