

# THE *Current*

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## **UCSB Emeritus Professor Examines the Effects of Climate Change on Civilizations**

Global warming is currently one of the world's most pressing issues, but the phenomenon of climate change is not specific to the 21st century. A new book by anthropologist Brian Fagan takes a look at the global effects of climate change that occurred during the Medieval Warm Period and examines how subtle shifts in the environment had far-reaching effects on human existence.

In "The Great Warming: Climate Change and the Rise and Fall of Civilizations" (Bloomsbury Press, 2008), Fagan, a professor emeritus of anthropology at the University of California, Santa Barbara, focuses on the period from the 10th to 15th centuries when the earth experienced a rise in average temperature that changed the climate worldwide.

Some civilizations, including those in Western Europe and the Norse and Inuit of the North Atlantic, flourished as long summers brought bountiful crops, population growth, and a burgeoning cultural scene, Fagan notes. However, other long-established societies, such as the Maya and Indians of the American southwest, collapsed from prolonged periods of drought.

He describes the ways in which different civilizations adapted to the centuries of irregular warming. Mayans, for example, created huge water storage facilities while

the Chimu lords of coastal Peru designed sophisticated irrigation systems. However, despite their efforts, they could not withstand the repeated multiyear droughts, which, according to Fagan, constitute the most dangerous element of global warming.

"When I began writing the book, I expected to focus on Europe," Fagan said. "But as I looked further afield I realized that for a lot of the world the Medieval Warm Period meant savage issues related to drought. With so much of the world currently suffering from the effects of drought, this struck me as a neglected problem."

While climate experts tend to focus on melting ice sheets, rising sea levels, and extreme weather events such as Hurricane Katrina and the severe flooding it caused, Fagan believes drought is the greater threat.

Citing conditions in eastern and sub-Saharan Africa among other areas, he writes in his book, "...if you look at the warm centuries with a global perspective, the wide incidence of drought is truly striking and offers a sobering message about tomorrow's world. Prolonged aridity was widespread in medieval times and killed enormous numbers of people. Evidence is mounting that drought is the silent and insidious killer associated with global warming."

Fagan, who retired from UCSB in 2003, was born in England and educated in anthropology and archaeology at Cambridge University. He conducted fieldwork in Central and East Africa before coming to the United States in 1966. He has written extensively about early man and North American and general archaeology, and his books on the interaction of climate and human society have established him as a leading authority on the subject. He is the editor of "The Oxford Companion to Archaeology" and the author of "Fish on Friday: Feasting, Fasting and the Discovery of the New World"; "The Long Summer"; and "The Little Ice Age," among others.

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