

October 17, 2007

COMMENTARY**Global Warming Delusions**
 By **DANIEL B. BOTKIN**
 October 17, 2007; Page A19

Global warming doesn't matter except to the extent that it will affect life -- ours and that of all living things on Earth. And contrary to the latest news, the evidence that global warming will have serious effects on life is thin. Most evidence suggests the contrary.



Kilimanjaro's shrinking ice cap is not directly related to global warming.

Case in point: This year's United Nations report on climate change and other documents say that 20%-30% of plant and animal species will be threatened with extinction in this century due to global warming -- a truly terrifying thought. Yet, during the past 2.5 million years, a period that scientists now know experienced climatic changes as rapid and as warm as modern climatological models suggest will happen to us, almost none of the millions of species on Earth went extinct. The exceptions were about 20 species of large mammals (the famous megafauna of the last ice age -- saber-tooth tigers, hairy mammoths and the like), which went extinct about 10,000 to 5,000 years ago at the end of the last ice age, and many dominant trees and shrubs of northwestern Europe. But elsewhere, including North America, few plant species went extinct, and few mammals.

We're also warned that tropical diseases are going to spread, and that we can expect malaria and encephalitis epidemics. But scientific papers by Prof. Sarah Randolph of Oxford University show that temperature changes do not correlate well with changes in the distribution or frequency of these diseases; warming has not broadened their distribution and is highly unlikely to do so in the future, global warming or not.


The key point here is that living things respond to many factors in addition to temperature and rainfall. In most cases, however, climate-modeling-based forecasts look primarily at temperature alone, or temperature and precipitation only. You might ask, "Isn't this enough to forecast changes in the distribution of species?" Ask a mockingbird. The New York Times recently published an answer to a query about why mockingbirds were becoming common in Manhattan. The expert answer was: food -- an exotic plant species that mockingbirds like to eat had spread to New York City. It was this, not temperature or rainfall, the expert said, that caused the change in mockingbird geography.

You might think I must be one of those know-nothing naysayers who believes global warming is a liberal plot. On the contrary, I am a biologist and ecologist who has worked on global warming, and been concerned about its effects, since 1968. I've developed the computer model of forest growth that has been used widely to forecast possible effects of global warming on life -- I've used the model for that purpose myself, and to forecast likely effects on specific endangered species.

I'm not a naysayer. I'm a scientist who believes in the scientific method and in what facts tell us. I have worked for 40 years to try to improve our environment and improve human life as well. I believe we can do this only from a basis in reality, and that is not what I see happening now. Instead, like fashions that took hold in the past and are eloquently analyzed in the classic 19th century book "Extraordinary Popular Delusions and the Madness of Crowds," the popular imagination today appears to have been captured by beliefs that have little scientific basis.

Some colleagues who share some of my doubts argue that the only way to get our society to change is to frighten people with the possibility of a catastrophe, and that therefore it is all right and even necessary for scientists to exaggerate. They tell me that my belief in open and honest assessment is naïve. "Wolves deceive their prey, don't

DOW JONES REPRINTS

 This copy is for your personal, non-commercial use only. To order presentation-ready copies for distribution to your colleagues, clients or customers, use the Order Reprints tool at the bottom of any article or visit: www.djreprints.com.

- [See a sample reprint in PDF format.](#)
- [Order a reprint of this article now.](#)

they?" one said to me recently. Therefore, biologically, he said, we are justified in exaggerating to get society to change.

The climate modelers who developed the computer programs that are being used to forecast climate change used to readily admit that the models were crude and not very realistic, but were the best that could be done with available computers and programming methods. They said our options were to either believe those crude models or believe the opinions of experienced, data-focused scientists. Having done a great deal of computer modeling myself, I appreciated their acknowledgment of the limits of their methods. But I hear no such statements today. Oddly, the forecasts of computer models have become our new reality, while facts such as the few extinctions of the past 2.5 million years are pushed aside, as if they were not our reality.

A recent article in the well-respected journal *American Scientist* explained why the glacier on Mt. Kilimanjaro could not be melting from global warming. Simply from an intellectual point of view it was fascinating -- especially the author's Sherlock Holmes approach to figuring out what was causing the glacier to melt. That it couldn't be global warming directly (i.e., the result of air around the glacier warming) was made clear by the fact that the air temperature at the altitude of the glacier is below freezing. This means that only direct radiant heat from sunlight could be warming and melting the glacier. The author also studied the shape of the glacier and deduced that its melting pattern was consistent with radiant heat but not air temperature. Although acknowledged by many scientists, the paper is scorned by the true believers in global warming.

We are told that the melting of the arctic ice will be a disaster. But during the famous medieval warming period -- A.D. 750 to 1230 or so -- the Vikings found the warmer northern climate to their advantage. Emmanuel Le Roy Ladurie addressed this in his book "Times of Feast, Times of Famine: A History of Climate Since the Year 1000," perhaps the greatest book about climate change before the onset of modern concerns with global warming. He wrote that Erik the Red "took advantage of a sea relatively free of ice to sail due west from Iceland to reach Greenland. . . . Two and a half centuries later, at the height of the climatic and demographic fortunes of the northern settlers, a bishopric of Greenland was founded at Gardar in 1126."

Ladurie pointed out that "it is reasonable to think of the Vikings as unconsciously taking advantage of this [referring to the warming of the Middle Ages] to colonize the most northern and inclement of their conquests, Iceland and Greenland." Good thing that Erik the Red didn't have Al Gore or his climatologists as his advisers.

Should we therefore dismiss global warming? Of course not. But we should make a realistic assessment, as rationally as possible, about its cultural, economic and environmental effects. As Erik the Red might have told you, not everything due to a climatic warming is bad, nor is everything that is bad due to a climatic warming.

We should approach the problem the way we decide whether to buy insurance and take precautions against other catastrophes -- wildfires, hurricanes, earthquakes. And as I have written elsewhere, many of the actions we would take to reduce greenhouse-gas production and mitigate global-warming effects are beneficial anyway, most particularly a movement away from fossil fuels to alternative solar and wind energy.

My concern is that we may be moving away from an irrational lack of concern about climate change to an equally irrational panic about it.

Many of my colleagues ask, "What's the problem? Hasn't it been a good thing to raise public concern?" The problem is that in this panic we are going to spend our money unwisely, we will take actions that are counterproductive, and we will fail to do many of those things that will benefit the environment and ourselves.

For example, right now the clearest threat to many species is habitat destruction. Take the orangutans, for instance, one of those charismatic species that people are often fascinated by and concerned about. They are endangered because of deforestation. In our fear of global warming, it would be sad if we fail to find funds to purchase those forests before they are destroyed, and thus let this species go extinct.

At the heart of the matter is how much faith we decide to put in science -- even how much faith scientists put in science. Our times have benefited from clear-thinking, science-based rationality. I hope this prevails as we try to deal with our changing climate.

Mr. Botkin, president of the Center for the Study of the Environment and professor emeritus in the Department of Ecology, Evolution, and Marine Biology at the University of California, Santa Barbara, is the author of "Discordant Harmonies: A New Ecology for the Twenty-First Century" (Replica Books, 2001).

URL for this article:

<http://online.wsj.com/article/SB119258265537661384.html>

Copyright 2007 Dow Jones & Company, Inc. All Rights Reserved

This copy is for your personal, non-commercial use only. Distribution and use of this material are governed by our [Subscriber Agreement](#) and by copyright law. For non-personal use or to order multiple copies, please contact Dow Jones Reprints at 1-800-843-0008 or visit www.djreprints.com.