

Climate Confusion: How Global Warming Hysteria Leads to Bad Science, Pandering Politicians and Misguided Policies That Hurt the Poor. By Roy W. Spencer. 2008. Encounter Books, New York, NY, USA. 191 p. US\$21.95. hardcover. ISBN-13: 978-1-59403-210-3.

The June issue of *Rangelands* was devoted entirely to the topic of climate change. Brown & Thorpe (*Rangelands* June 2008) state, “There is a recent consensus on the need for humans to mitigate *their effects* [emphasis mine] on climate and adapt to likely climatic shifts” (p. 3). Roy Spencer in *Climate Confusion* questions the wisdom and accuracy of this “recent consensus” and the reliability of climate models, which are the primary source of predictions for catastrophic global warming. I highly recommend that you take time to read his book.

Dr Roy W. Spencer received his PhD in Meteorology from the University of Wisconsin in 1981. He was codeveloper of the original method for precise monitoring of global temperatures from Earth-orbiting satellites and currently serves as the US Science Team Leader for the Advanced Microwave Scanning Radiometer for EOS (AMSR-E) flying on NASA’s Aqua satellite.

Climate Confusion is written for the lay reader. Dr Spencer does not load the book with data and literature citations; he avoids technical jargon wherever possible and adds a bit of humor, for those that can consider humor on this topic. He notes, “...while science deals with observed facts or measurements, scientific debate usually does not arise over the existence of those measurements. Instead, most of the debate usually centers on differing opinions about what the measurements mean, what they are telling us about the way nature works” (p. 36). He does not debate the increase in atmospheric CO₂ or the recent increase in global temperature (he measured it), but instead discusses what these mean and how they relate to the climate models used to make long range predictions for global climate. As a climatologist, he understands the complexities of climate and is keenly aware of the limitations of current scientific knowledge to make accurate long-range predictions for climate change.

Dr Spencer notes that climate models are the result of aggregating subcomponent models for the parts of climate that are well understood and are based on aggregated assumptions about how climate works. Thus, they are “bottom-up” mechanistic models. As such, they do not contain components for those parts of climate that are not well understood (e.g., clouds and precipitation or solar activity). The missing components are the main sources of “global cooling.” Models can have positive and negative feedback systems and the current climate models have primarily positive feedbacks from greenhouse gases to global temperature, which result in the predictions of catastrophic global warming with increasing atmospheric CO₂. He suggests that there are important negative feedback systems that result in global cooling that have not been incorporated into the climate models. Webber suggests, “maybe it is time to entertain alternative paradigms to climate modeling...to step back and examine the overall ‘emergent properties’ of the climate system. In this approach, the major macro-scale features of the climate system are explained in as simple terms as possible, with as few variables as possible” (p. 84).

Spencer states, “what scientists claim to know about manmade global warming is based as much upon faith as it is upon knowledge” (p. 85). Only one-third of 530 climate scientists surveyed by The Heartland Institute in May of 2007 agreed that “climate models can accurately predict climate conditions in the future” (p. 85). He notes that climate modelers are usually physicists who look at the climate system differently than meteorologists. Meteorologists are much more skeptical about global warming than the physicists/modelers.

Spencer claims that global warming is a religion for radical environmentalists. “For them, human interference in the climate system is evil. Without mankind the earth would be undefiled. Our use of natural resources is a transgression against our Earth Mother” (p. 95). He believes in the power of the free market system as the best regulator of supply and demand for natural resources. Chapters address “Dumb Global Warming Solutions” and “Less Dumb Global Warming Solutions.” He is not hesitant to express his views and the reader clearly knows what he believes and why. As range managers, we are trained to inventory and analyze all of the data and alternatives in light of alternative hypotheses before making critical policy decisions.

I found his presentation of science sound. Your reactions will probably depend on where you are positioned relative to politics and religion. *Climate Confusion* will stimulate you to think more deeply about this important topic and perhaps to make more informed decisions as you exercise your rights and duties as a citizen.

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