

lowed up on that closely, but it's quite interesting, that we've been sitting around with nothing. I guess that every day it gets delayed, shortens it a little bit, and it will make the cycle a bit weaker. So it's going to be interesting to see what happens as we get through this supposedly "big one," and then on to the smaller one after that.

But from a strategic point of view, from this country's point of view—because there's a very good match-up between climate and these solar cycles—if the pattern holds, the last time that there was a cycle that was like what cycle 25 is supposedly going to be like, was during the Dalton Minimum. And during that time, a lot of wheat agriculture was affected. As you know, the Canadian breadbasket is an enormous producer of wheat—in Saskatchewan alone, I think it's something like 22 million bushels of grain every year. You look at what the impact might be, not only of a delayed harvest, but also early frost, and lower temperatures out there, which influences how the wheat heads. I was talking to somebody who suggested that wheat production could fall from 22 million bushels down to 10 million bushels, if you had like a 1-2°C drop in temperature in that region. Agriculture will be very, very seriously curtailed out there.

So from a strategic point of view, that's bad news! And North America is a relatively small continent; you think of Eurasia, which has vast areas that are in grain production—if it's bad here, it's magnified when you get to those places. So, there could be very, very serious agricultural issues when we arrive at the 20-teens.

EIR: I've talked to guys who actually believe that an increase in CO₂ will actually be beneficial to agriculture. If you

look at an increase in CO₂, in, say, an area that has more drought conditions, like in Australia, the wheat down would actually benefit from a higher CO₂, because they would use less water, and they wouldn't be so water-stressed.

Patterson: That's right, but I refer to it from the Canadian perspective, where basically it's a frost issue in the West. And so, if the seasons are shorter and it's not very warm, the CO₂ fertilization certainly is going to help some, but it's not going to offset things all that much. Maybe in parts of the U.S.—okay, the U.S. has great climate variation, all the way from like what it would be in Saskatchewan, in northern North Dakota and so on, right down to places where they'd love it probably a little bit cooler! So, it would probably be better production for them....

The Challenge for Scientists

I think that the biggest problem, is that there's a *real* lack of communication amongst the various sorts of disciplines and sub-disciplines. I wasn't kidding when I said, you go to the earth science community, and you'll find that the overall consensus in our community is much different than you'd see in the biological community, and for some reason, we don't speak out too much, in the earth science community. And so, I think that people don't quite appreciate that scientists in this community are not quite as excited about the global warming doom, as some of the other community, like the modelers, who are able to somehow get their point across much more effectively. And my hat's off to them, in that regard, I guess. Because we've been failures in the earth science community. Maybe we wouldn't have been in this mess, if we'd been more vocal earlier on.

Malthusian Claims Pandemic Disease Will Stop Warming

William F. Ruddiman of the University of Virginia argues that man-made global warming began thousands of years ago, as a result of the production of CO₂ caused by the discovery of agriculture and subsequent technological innovations in the practice of farming ("The Anthropogenic Greenhouse Era Began Thousands of Years Ago," *Climatic Change*, December 2003). He claims that the other main source of CO₂ was the cutting of forests and burning of wood and peat to heat homes in Eurasia and North America, which he maintains is why glaciers didn't advance farther south from the Arctic, as they did in previous glacial advances. Ruddiman bases this bizarre hypothesis on fraud-

ulent ice core data and computer modeling of the extent of deforestation in Europe and North America over the past 8,000 years.

Ruddiman is a neo-malthusian and a follower of "population bomb" hoaxster Paul Ehrlich (see "Where the Global Warming Hoax Was Born," *EIR*, June 8, 2007). Ruddiman repeatedly asserts that man created climate problems by developing new technologies which caused a slight rise in CO₂. (The amount of emissions was barely above the level of natural variation from outgassing from the oceans.)

One might laugh at the notion that early Europeans burning wood staved off the worst effects of the last ice age—which was the response among most scientists to Ruddiman's paper. But his more important point is more blood-curdling: that pandemic diseases such as the Black Death of the 14th Century cause a decrease in CO₂ and a decrease in temperature. In other words, such diseases will reduce the population, thereby creating a cooler world.

—Gregory Murphy