

PART 4: OUR FUTURE WORLD?

GLOBAL WARMING IN PERSPECTIVE

by Melinda Christian





THE STUDY OF EARTH'S HISTORY IS NOT A SUBJECT OF IDLE CURIOSITY. WE NEED TO KNOW MORE IF WE HOPE TO SOLVE THE ENVIRONMENTAL CRISES THAT FACE HUMANITY. THAT'S ONE REASON THAT A BIBLICAL PERSPECTIVE ON HISTORY IS SO IMPORTANT. IT HELPS US MAKE SENSE OF THE PROBLEMS WE FACE TODAY AND PREPARE FOR THE FUTURE.

These days it seems you can hardly turn on the TV, go online, or open your morning newspaper without being confronted with the idea of global warming. In his 2006 Oscarwinning documentary *An Inconvenient Truth*, former U.S. Vice President Al Gore presents global warming as an imminent threat to the planet and paints an alarming picture of a future in which mankind ultimately destroys life on earth.

But global warming is far more complex than one 96-minute film can convey, and most people are simply not getting some of the most important information.

HOW DO WE APPROACH THE SUBJECT OF GLOBAL WARMING?

It's clear that global warming is a complex and emotionally charged

issue, one that cannot be ignored in today's cultural and political climate. New claims and counter-claims appear in the press with numbing regularity, leaving many Christians uncertain what to believe. Rather than getting lost in the details, it is necessary first to uncover the basic facts and then to understand the assumptions that drive the interpretations of those facts.

Although many people may think otherwise, all of us have assumptions (beliefs) that influence how we look at the facts. If a scientist believes in billions of years of earth history, he will assume, for example, that polar ice needed hundreds of thousands of years to build up over two miles in depth. Scientists who believe in the biblical account of Noah's Flood, on the other hand, believe the ice must have appeared shortly after the Flood. Depending on their assump-

tions, equally skilled scientists can reach very different conclusions.

In the global warming debate, it is important to separate fact from interpretation. We hear a great deal about the dangers of CO₂ emissions and greenhouse gases, but rarely do we hear the facts behind the hype.

Even "facts" need to be qualified. For example, NASA has reported that the average number of major hurricanes (categories 4 and 5) has doubled since 1970. But this is "selective data sorting." When you calculate the average of all hurricanes, you find much less of an increase. In fact, the year 2007 saw a decrease in hurricanes. So NASA's "fact" may be true, but it is not the whole truth.

Let's examine the basic facts and assumptions behind five major claims about global warming . . .

GLOBAL WARMING'S TOP FIVE CLAIMS: FACT OR FICTION?



GLDBAL WARMING IS REALLY HAPPENING.

Global warming is really happening, in the strictest definition of the term. According to the National Climatic Data Center, the average global surface temperature has risen approximately 1.2°F (0.7°C) since 1880. However, this fact alone does not tell us the causes of the warming.

Rise of the Global Mean Temperature Since 1880



For over a century, the National Climatic Data Center has been gathering temperatures from thousands of sites worldwide on land and sea. By carefully approximating temperatures of inaccessible areas, the NCDC has produced a very reliable approximation of changes in the earth's temperature.

CLAIM #Z

WE ARE CAUSING GLOBAL WARMING.

The challenge is to separate natural and human causes, especially when we still know so little about the factors in climate change.

It helps to get some historical perspective. We know from Scripture that the worldwide Flood changed the earth's climate dramatically, and ocean sediments indicate that plate tectonics during the Flood had greatly heated the oceans, rising to a temperature at least 36°F (20°C) warmer than today's oceans. From that warm period, temperatures dropped dramatically as the earth entered an Ice Age (see "Ice Age," p. 81).

Since the Ice Age, the earth's temperature has fluctuated by only a few degrees. For example, a medieval "warm period" (AD 900 to 1300) was followed by a "little ice age" (1300 to 1880), when the overall temperature dropped about 2°F (1°C).

These relatively recent fluctuations can be correlated to natural changes, such as volanic eruptions and cycles in the sun's radiation. (When the earth receives more energy from the sun, the earth gets warmer.) It is logical to assume that similar factors continue to have some influence on today's global warming.

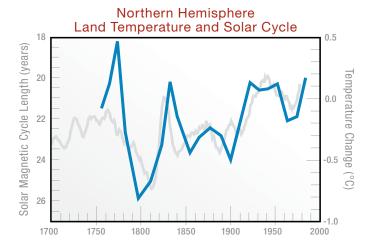
What about human causes of global warming? Alarmists would have us believe that increased CO2 emissions have triggered global warming. But it is important to understand greenhouse gases. Basically, these are gases in the earth's atmosphere that regulate temperature by holding in heat from the sun, and as such these gases are necessary for life. The primary greenhouse gas, which is responsible for the vast majority of the greenhouse effect, is water vapor. Carbon dioxide, the second most common greenhouse gas, provides only a tiny fraction of the greenhouse effect.

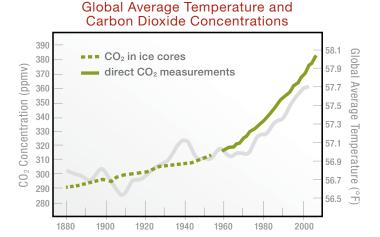
It is certainly true that the burning of fossils fuels is pumping more and more CO₂ into the atmosphere, but it does not necessarily follow that these gases are the sole *cause* of the warming. In fact, higher concentrations of

of ould CO₂ llobal o unsically, atmoare by and as

 CO_2 may be, in part, a *result* of warmer temperatures. The oceans have much more CO_2 than the atmosphere, and when the oceans warm up, the CO_2 escapes into the atmosphere. (We see a similar effect when we see gas bubbling out of a glass of warm Coke.)

We have much more to learn about climate change. But looking at the current evidence, it seems very likely that both natural and human factors are at fault, perhaps as much as 50-50, according to meteorologist Mike Oard.²

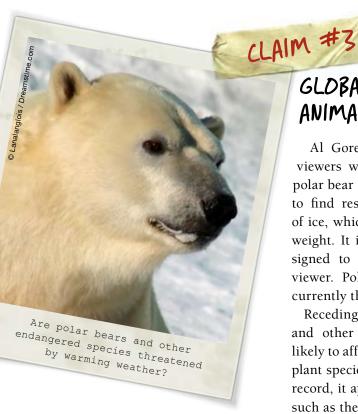




Recent increases in global temperatures (seen in gray on both charts) run roughly parallel to changes in the sun's radiation (left graph) and increases in the amount of CO₂ in the atmosphere (right graph). But how can we tell what is actually causing the change? Is it a combination of both? Are other factors involved? We cannot be completely sure without doing much more research.

Data Source Solar Cycle: S. Baliunas and W. Soon/Astrophysical Journal 1995

 $Data\ Source\ CO_2:\ Carbon\ Dioxide\ Information\ Analysis\ Center\ http://cdiac.esd.ornl.gov/ftp/trends/co2/$



GLOBAL WARMING WILL CAUSE MANY ANIMALS AND PLANTS TO GO EXTINCT.

Al Gore's documentary presents viewers with a computer-animated polar bear treading water, struggling to find rest on the last, thin shelf of ice, which breaks apart under his weight. It is an image expressly designed to provoke emotion in the viewer. Polar bears, in reality, are currently thriving.

Receding glaciers, melting ice caps, and other changes are, of course, likely to affect a variety of animal and plant species. But based on the fossil record, it appears that many species, such as the *Miohippus* (a small three-

toed, woodland horse) and the woolly mammoth, flourished in the changing climates after Noah's Flood, and eventually went extinct (see "A Dark and Stormy World," p. 78). Humans clearly had nothing to do with these climate changes and extinctions.

According to some climate models, which use current data and a variety of assumptions to predict future climate patterns, several plant and animal species could go extinct by 2050 due to climate change. Currently, however, there are no documented extinctions resulting from global warming.



THE OCEANS WILL RISE DRAMATICALLY IN THE NEXT CENTURY.

This is one of the more alarming claims. In *An Inconvenient Truth* Gore presents a model in which an ice sheet, whether in Greenland or West Antarctica, slides into the sea, raising the ocean level by 20 feet (6 m) and submerging much of the earth's coastlines, home to 100 million people. The film implies that this will happen within the next 50 years.

While this would certainly be alarming if it were true, no hard scientific evidence exists to back up the prediction. In fact, even Gore's staunchest supporters don't seem to be convinced: www.stopglobalwarming.org claims that the ocean level will rise only six feet in the next hundred years, a sub-

stantial difference—but they present no scientific evidence to back up even their claim.

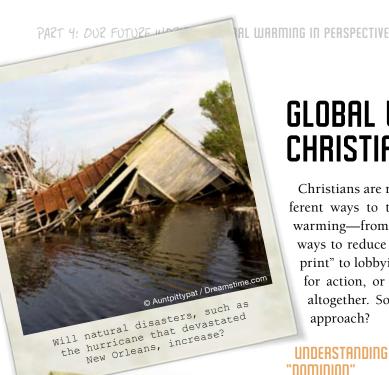
Based on climate models, the UN Intergovernmental Panel on Climate Change estimates that ocean levels will rise approximately 16 inches (41 cm) during this century. While this could result in many inconveniences (without proper planning), it is certainly not the "doomsday" that's been so widely predicted. Nor does such a change seem very significant compared to the rapid rise of the

oceans in the past—approximately

will regions of the world, is will regions of the world, be submerged by melting ice caps?

ted. Nor 200–300 feet (60–90 m)—when the

200–300 feet (60–90 m)—when the ice melted at the end of the Ice Age, flooding the coasts and burying early human settlements after Babel.



GLOBAL WARMING WILL CAUSE AN INCREASING NUMBER OF WEATHER CATASTROPHES.

CLAIM #5

Global warming has been blamed for increased hurricanes, tornadoes, floods, droughts, and extreme temperatures. But we must keep a few things in mind. First, extreme weather has never been out of the ordinary since Noah's Flood. Secondly, scientists now have satellites and other advanced equipment that can identify and record modern weather events that would have gone unrecorded in the past, making it difficult to validate whether these events have been increasing.

While the number of hurricanes has increased in recent decades, a recent study in the journal Nature Geoscience concludes that global warming is not to blame for increased hurricanes and, in fact, hurricanes are likely to decrease by the end of the century.3

Currently, there is insufficient evidence to clearly identify global warming as the cause of extreme weather events.

GLOBAL WARMING: HOW SHOULD CHRISTIANS RESPOND?

Christians are reacting in very different ways to the issue of global warming-from finding practical ways to reduce their "carbon footprint" to lobbying the government for action, or ignoring the issue altogether. So what is a biblical approach?

UNDERSTANDING HUMAN "Dominion"

When God gave Adam dominion over the earth, he was told to take care of the garden. In verse after verse of Scripture, we learn that God made us stewards of His earth, caretakers of the natural resources that He has provided on this planet. "The earth is the Lord's, and all its fullness" (Psalm 24:1).

But does this mean that we are to protect nature at any cost?

God did not create human beings merely to serve or "preserve" the earth. Rather, He made us in His image, as His highest creation, and He gave us the privilege and duty to glorify Him in everything we do, including managing the earth to make it more beautiful and productive. Just as God "planted a garden," we want to be good gardeners, too.

The earth was made as our dwelling place, and while it is our responsibility to maintain it, we must not place higher importance on the environment than on the people who inhabit it. The Industrial Revolution, so often vilified by global warming activists, has improved the quality of life for millions, even billions, of people. It has also "saved" the lives of untold millions.

WEIGHING OUR ACTIONS

Whatever action we take, whether as individuals or through government action, we must carefully weigh the consequences. While many people support laws to reduce CO₂ emissions, believing that this will appreciably slow the progress of global warming, we must consider whether the science supports this claim. We must also beware of unintended consequences, such as the loss of personal liberties.

Whatever a person's view of the government's role, it is undeniable that laws to limit CO, output would have far-reaching effects on the poor. The increased costs of producing food, powering vehicles, and heating and cooling homes are only a few of the potential negative results. Lower-income families, especially in less-developed countries, would be hit especially hard.

E. Calvin Beisner, a respected environmental expert, examines the economic side-effects of anti-CO, policies and concludes: "The policies that are being promoted to fight global warming not only will not make a difference . . . but also will have a great harmful impact on the world's poor."4

According to Beisner, even the vast changes proposed by global warming activists would have only a negligible effect on CO, levels in the atmosphere, with little possibility of reversing or even slowing global warming. But if the proposed changes become reality, the potential costs in lives and freedoms would be incalculable.

But should we do nothing to fight global warming? There are practical things individuals can do to maintain our planet and keep it beautiful and safe for the next generation, such as reducing waste, recycling, and driving fuel-efficient vehicles. The choice to take any of these—or stronger—measures should always be based on a clear understanding of the facts and the eternal principles in God's Word.

God's Word tells us about a "new heaven and a new earth" that He is planning for His people, free of sin and the Curse. Our current environmental problems are serious and worth further thought and action, but the Bible puts all such issues into proper perspective. While we need to behave wisely in the fleeting moments we have on this earth, a much greater change is coming, one that should modify our behavior—the "global warming" described in 2 Peter 3:10. "But the day of the Lord will come as a thief in the night, in which the heavens will pass away with a great noise, and the elements will melt with fervent heat: both the earth and the works that are in it will be burned up." ■

NOTES

- ¹ S. A. Austin, J. R. Baumgardner, D. R. Humphreys, A. A. Snelling, L. Vardiman, and K. P. Wise, "Catastrophic Plate Tectonics: A Global Flood Model of Earth History," in R. E. Walsh, ed. Proceedings of the Third International Conference on Creationism (Pittsburgh: Creation Science Fellowship, 1994), p. 615.
- ² After a review of the scientific literature, meteorologist Mike Oard estimates that natural causes account for about 50% of surface temperature increases since 1880. M. Oard, "How Much Global Warming Is Nature?" www.answersingenesis.org/ articles/am.
- ³ Thomas R. Knutson et al., "Simulated Reduction in Atlantic Hurricane Frequency under Twenty-First-Century Warming Conditions," *Nature Geoscience*, May 18, 2008, pp. 359–364.
- ⁴ D. James Kennedy and E. Calvin Beisner Overheated: A Reasoned Look at the Global Warming Debate (Ft. Lauderdale, Florida: Coral Ridge Ministries, 2007), p. 23.



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