

A Hot Topic

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What is the second most popular item in the news beside the recent election and its aftermath? Climate change. Climate change is very politicized and fiercely contested. More and more it is a hot button issue that politicians feud over. Recall seeing any of these headlines? “Obama bans new oil drilling in Arctic Ocean,” “Trump nominates climate change skeptic,” “Why is Donald Trump discussing climate change with Al Gore?” “Environmentalism dismay at latest Trump Appointment;” “2016 set to become hottest year on record.” Climate change is not only a local political issue, it is also discussed at an international level, as was seen during fall 2015, when the world watched as its leaders met in Paris at the United Nations Climate Change Conference. Young people also encounter the issue at college. Take a class in any scientific discipline—earth science, biology, ecology, chemistry, or natural resource management—you will hear it brought up.

With all the attention climate change gets, as Christians we sure don’t seem to talk a whole lot about it, at least in my experience. Climate change seems more to be the butt of jokes, rather than a current event that is seriously discussed and addressed from a biblical perspective. What is our response as Christians? Do we have a response? My purpose in writing this column is not so much to convince you either to support or reject the legitimacy of climate change and man’s involvement; I will let the astute reader do his own research and make that decision. My purpose is to point out that there are serious issues brought up in light of climate change that we should be talking about. Climate change and the events surrounding the issue are changing the way the world operates. It behooves us to joke less and seriously discuss more. Our calling as Christians is not to have a knee-jerk reaction to what may seem like a ridiculous idea on the outside. Whether or not the issue has any legitimacy, we still must have a biblical perspective on it.

This month we will describe briefly what climate change and global warming are and see how the world responds to these issues. There is so much information out there on climate change that it is easy to miss the forest for the trees. There are many arenas in which this issue appears—international and domestic politics, news media, education, social justice campaigns,

and scientific literature. Before we form a biblical perspective on the issue (next month), we need to sort through some of these things.

Time for a quick crash course on climate change. We can define climate change simply as a shift in long term (a few decades or more) weather patterns. Global warming refers to a general warming trend in earth's climate. Fluctuations in earth's temperature and climate are natural, and the scientific community openly acknowledges these facts. History has recorded global warming events and global cooling events in the past. Two events are the most notable, the Medieval Warm Period (approximately 950-1250) and the Little Ice Age (approximately 1500-1800). So if Earth's climate has naturally fluctuated in the past with natural global cooling and warming trends, why the great ruckus about climate change and global warming today? The concern is that the natural trend of warming that we are currently experiencing is being accelerated by the activities of man, most notably his consumption of fossil fuels (coal, oil, and natural gas). Fossil fuels, when burned for energy, are pumped into the atmosphere, mostly in the form of carbon dioxide, which contributes to earth's greenhouse effect. The greenhouse effect is earth's natural way of preventing large fluctuations in temperature. Greenhouse gases form a layer that works to trap some of the sun's radiation. Too much of a greenhouse effect would create a global hothouse and too small of a greenhouse effect would usher in another ice age given enough time. The concern today is that we are creating a global hothouse by consuming fossil fuels, which in turn increases the greenhouse effect.

Step back for a moment and consider the care of God for his creatures by way of the greenhouse effect. This layer of gas surrounding earth is all that separates us from the vastness of space—certain death. We see God's hand in providing this creation of his with a built in mechanism like the greenhouse effect to protect itself, allowing life to thrive on the surface. A term thrown around the scientific community to describe our planet is "Goldilocks planet"—the perfect distance from the sun with the perfect atmospheric composition gives us a planet that is not too hot and not too cold.

Back to the issue at hand. Atmospheric measurements have shown an increase of carbon dioxide since the beginning Industrial Revolution. Measurements also reveal an increase in temperature following the increase of this greenhouse gas in the atmosphere. These are facts. Now the real question. Is earth's accelerated warming trend caused by an increase in greenhouse gases from man's fossil fuel use? It makes sense that it would, and there is more and more data

pointing toward this fact. A greater concentration of greenhouse gases in the atmosphere should trap more of the sun's radiation, warming the planet. However, while according to scientific standards the two measurements are strongly correlated, this does not prove causation. Given the weight of the data, the general consensus of the scientific community is that the natural warming trend we are experiencing has been accelerated by man's use of fossil fuels.

Whether or not man has accelerated the process, earth's weather patterns are trending warmer, and there are negative consequences. Sea ice at the poles is melting and glaciers are retreating. This combination is causing the oceans to rise and increase in temperature, disrupting food chains. Low lying islands like the Marshall Islands in the southern Pacific are slowly disappearing. High tides are more of a problem than they were in the past. Oceans are becoming more acidic, leading to the death of coral reefs.

How is the world responding to these issues? First, for better or for worse, more money is being allotted for climate change research. The United States spends about \$1 billion each year to fund climate change research efforts in the Arctic and Antarctica.¹ More money is also being spent on switching over to cleaner energy sources like wind and solar.

Second, for those that hold to an evolutionary worldview, there is general fear and some overreaction to climate change. Earth must be saved at all costs for the preservation of mankind. Any drastic changes that threaten to destroy life on earth could eliminate several billion years' worth of evolutionary progress. If life is wiped out, the evolutionary clock would be reset. For the unbeliever with an evolutionary worldview, this life is all there is; there is no afterlife.

Third, some see the issue as beyond remedy and are focusing on finding a new home—space. Many options have been raised, from the moon to Mars, even distant solar systems. Experiments have been conducted on earth, mimicking what a completely self-sustaining, earth-like system on another planet might be like. Climate change is only part of the reason man is drawn to life in space. It is the general fear of the unknown that is driving man to make himself more adaptable, creating “cosmic immortality” for mankind in space.² These experiments have mostly failed, the most notable one being Biosphere 2 in 1991, which older readers might remember. How does one fully replicate the beautiful balance of all of earth's natural, life-sustaining systems? God created man perfectly adapted to live on earth, not in space.

¹ <http://www.nytimes.com/interactive/2015/10/27/world/greenland-is-melting-away.html>

² <http://www.nytimes.com/2013/06/10/booming/biosphere-2-good-science-or-bad-sense.html>

Fourth, while there are many responses to climate change (my list is not comprehensive) and many efforts to combat rising temperatures, it is interesting and beneficial to note that some things are unnecessarily attributed to climate change. For example, one scientific study of the Atlantic cod population in the Gulf of Maine concluded that cold water from ice melt in the Arctic and in Greenland (caused by global warming) has lowered the temperature in the habitat of Atlantic cod. This lower temperature has apparently disrupted the food web and prevented the population from recovering despite strict fishing regulations imposed in 2010. The news media took this study, proclaiming that climate change had caused cod populations to collapse, removing emphasis from the fact that the population had been initially decimated by overfishing in the 20th century.³

That is how the world is responding to climate change and global warming, but what about us? As Christians, we realize that we are only sojourners on earth. The preservation of our planet is not our only hope. There will be a new creation, a new heaven and a new earth. This biblical perspective does not, however, minimize our responsibility to care for the creation or cause us to avoid the issue of climate change. To that biblical perspective we turn next month.

³ <https://aeon.co/ideas/why-we-need-to-stop-thinking-so-much-about-climate-change>