

September 2004

DEGLACIATION OR "THE MELTDOWN"**Part two of: COULD THE ICE AGE HAVE BEEN CAUSED BY THE GENESIS FLOOD?**

By Mark Stephens, MCS

This is part two of a two part article concerning the Ice Age caused by the Genesis Flood: August issue, "The Buildup"; September issue, "The Meltdown". Part one can be seen at the TASC web site: <http://members.aol.com/dwr51055/tasc/taschome.htm>

In the August, 2004, TASC newsletter, I shared with you some of the scientific research and meteorological observations from Michael J. Oard, who concluded that the Ice Age could have been caused by the Genesis or Noahic Flood recorded in the Bible.¹ That article addressed primarily the build-up of snow and ice and the resulting glaciation of the Ice Age that Oard calculates took place over a span of 500 years after the worldwide Genesis Flood, which is also calculated by his scientific methods to have occurred about 4,200 years ago.² This article will address the deglaciation or "melt-down" of the Ice Age that took about 200 years according to calculations based on Oard's research.^{3, 4} Consequently, the total time for a post-Flood ice age is only about 700 years.⁵ This contrasts to the uniformitarian theory of naturalistic evolution from as few as four to more than twenty ice ages covering tens to hundreds of thousands to millions of years.⁶ For more in-depth study and understanding you may wish to order a copy of Oard's book titled, *An Ice Age Caused by the Genesis Flood*, by calling the Institute for Creation Research at 800-628-7640 or coming out to our monthly TASC meetings and purchase a copy. A less technical book for children and adults by Michael Oard and his wife, Beverly Oard, titled *Life in the Great Ice Age* can be obtained by the same methods.

To understand both the buildup and meltdown of the Ice Age in this same article—you may read all of part one of this two part article for more details by visiting the TASC web site listed above—I will first provide a brief review of the buildup or glaciation period followed by a more thorough assessment of the meltdown or deglaciation. Oard proposes that the catastrophic events of the Genesis Flood included hot water from the break-up of the "fountains of the great deep", as recorded in Genesis 7:11 of the Bible, that mixed with the ocean water from pole to pole, warmed the oceans, and caused a large abundance of moisture through evaporation for

much higher snowfall in the winters. The abundance of moisture from evaporation in the resulting warmer oceans, coupled with very high numbers of volcanic eruptions with high amounts of volcanic ash particles thrown into the atmosphere for many years after the flood, caused much cloudiness and cooler summers. According to Oard, these post-Flood conditions provided the requirements for rapid glaciation for an ice age, i.e., much cooler summers and moderately cold winters (and with much higher snowfall due to the warmer ocean currents flowing into the mid- to high-latitude continents—an interesting weather condition then compared to colder winters in modern day) compared to the colder winters we have today. This unique combination of weather conditions would result in incomplete summer melting of snow with continued buildup of snow in the winters causing glaciation that would move farther downward from the high- to mid- latitude continents. In contrast to the creation science observations, these unique requirements are very difficult to meet with the uniformitarian theories of naturalistic evolution.⁷

Now, let us examine the meltdown or deglaciation proposed by Oard's research to have occurred over a period of about 200 years. According to Oard's model, outlined in his book, when the average ocean temperature cooled to 10° C, less oceanic evaporation occurred, fewer clouds were present at higher latitudes, more radiation penetrated to the earth's surface, and most ice sheets began to melt. The mid- and high-latitude winter climate would continue to cool, until it became colder than it is today. Summers would become warmer, but still cooler than at present. Storms would become drier and windier, while rivers would be gorged with meltwater and sediment. Drastic ecological changes would stress plants and animals. Some animals would become extinct, while others would be forced toward the equator. At this time, the woolly mammoth most likely became trapped in Siberia and Alaska, where it was unable to survive.⁸

Let us now examine the “big chill”, or winters turning much colder, during the deglaciation of the Ice Age. What would cause the winters to cool and become much colder during deglaciation? At glacial maximum, the relatively warm ocean (10° C) would still produce a somewhat mild climate. Although volcanism by now was probably very low, and sunshine more intense than during ice buildup, the presence of the ice sheets would continue generating cold continental air. This air spreading out over the higher latitude ocean would cause further cooling of the deep ocean. Eventually, the deep-ocean temperature would reach the current average of 4° C. At the same time, the mid- and high-latitude atmosphere during winter would gradually cool because of the presence of the ice sheets and because of diminishing amounts of heat and moisture in the air contributed by the cooling ocean. The ocean and atmosphere would likely cool below today’s average, as long as a substantial proportion of the ice sheets remained.⁹

The next question is, would the ice sheets melt during the big chill? The answer is a resounding yes, with the time required being surprisingly short. The most scientific approach to determine the time required for melting of the ice sheets is by use of the energy balance equation to estimate ablation rates.¹⁰ This approach has been attempted only within the past decade or two.¹¹ Lack of acquaintance with the energy balance equation and its use to estimate ablation rates is probably the principal reason why long-age estimates for deglaciation continue to be proposed.

The big chill would produce much colder temperatures in winter, but summers would be warmer than during the buildup of the ice sheets, although cooler than in the modern climate. Winter snowfall would be light, so that most of the summer sunshine and heat would be available to melt the ice sheets.¹²

As the post-Flood climate cooled, the Arctic Ocean would eventually freeze over. Sea ice would spread over the northern North Atlantic and North Pacific oceans, becoming more extensive than in modern winters. These changes would occur hand in hand with the atmospheric cooling, reinforcing each other. This strong cooling may explain why the Arctic Ocean is frozen today. Some investigators believe that if the Arctic Ocean suddenly became ice free, it would not refreeze.¹³ Evidently, a significantly colder climate than we experience at present must have caused the Arctic Ocean to freeze over for the first time.¹⁴

Although the tropics would cool slightly during the Ice Age, once ice-age volcanism diminished, the lower latitudes would recover more rapidly than mid- and high-latitudes. This would make the hemispheric north-south temperature difference during deglaciation greater than it is today, with the greatest gradient near the periphery

of the ice sheets. Consequently, the jet stream would be more intense, and the storm tracks would average further south.¹⁵

Let us now take a look at massive extinction of megafauna at the end of the Ice Age. If the association of animals from diverse climates during the Ice Age is mysterious, the extinction of many of the large animals, as well as birds, at the end is just as mysterious. At this time, the climate was supposedly warming according to most uniformitarian theories (as opposed to cooling according to the post-Flood model). A related, unsolved mystery of the uniformitarian theory is the massive extermination of the woolly mammoth in Siberia and Alaska.¹⁶ According to the uniformitarian model, which initially proposed four major ice ages and now more than 20 ice ages,¹⁷ the megafauna species and/or genera survived each previous glacial and interglacial period. But at the end of only the last ice age, many large mammals became extinct or disappeared from entire continents. These mammals include mammoths, mastodons, saber-toothed tigers, and ground sloths.¹⁸ North America was especially hard-hit, with about 34 genera of large mammals becoming extinct, compared to only 7 to 15 (depending on the investigator) in all the previous Pleistocene “ice ages”.¹⁹ Moreover, the largest species were preferentially decimated, and in contrast to other extinctions in the geological record, the mammals were not replaced in their habitats by other animals.²⁰ To compound the mystery, these mammals ranged over North America, Europe, and Asia, and had broad climatic tolerances. In other words, uniformitarian scientists are no closer to agreement on the extinction of these mammals after 200 years of gathering data, which should have brought greater understanding. The problem, likely, is in their uniformitarian assumption. The reason for very few extinctions after other proposed uniformitarian ice ages is that there were not any other ice ages.²¹

Can a post-Flood ice age account for the extinction of many large mammals? The answer is yes. First, the animals thrived during the Ice Age because the climate was wetter, with milder winters, in contrast to uniformitarian expectations. Although large animals can survive the cold better than small animals, they can do so only if enough food is available. A wetter climate would provide adequate food. During the development of the ice sheets, the climate was not cold enough to cause animal extinction. As the ice sheets melted, winters became colder and drier, not warmer as some authorities believe. Consequently, the largest animals would be the most stressed due to lack of food. Many could have migrated, but if the change was relatively sudden over a large area, they would have starved to death by the time they found a suitable habitat.

Here is where man, the hunter, enters the picture to finish the job. Man, who by this time had spread over most of the world (after having been dispersed after the Babel experience recorded in Genesis chapter 11—see my April 2004 TASC article) would also have been stressed by the harsher climate. Fruits, vegetables, and grains would have been scarce. He would have found these large mammals to be good hunting prey and possibly the only food available. The fact that man did hunt the large animals, especially mammoths, is shown by Neanderthal and Cro-Magnon cave paintings of these animals.²² (Note: Keep in mind that Neanderthal and Cro-Magnon man are considered fully human by creation scientists and lived a few thousand years ago as opposed to them being pre-human ancestors to modern man and living tens of thousands of years ago according to uniformitarian naturalistic evolutionary scientists.) In North America, four mammoths, with spear or arrow points embedded into the bone, have been found.²³ Arrow points have also been found in mastodons in North America and in a toxodon in South America.²⁴ Burned bones of several other animals have been found with presumed human cultural remains.

We may conclude that man probably took part in the extinction of many large mammals, but man was not completely responsible for the extinctions, as the survival of other large animals attests. Climate change is the other culprit. And again, the reason for very few extinctions after other proposed uniformitarian ice ages is that there were not any other ice ages.²⁵

What is the summary of what happened to the many woolly mammoths in Alaska and Siberia? This is an important aspect of the understanding of what happened at the end of the meltdown of the Ice Age. Oard, after examining much of the evidence by other investigators and his own research, proposes the following. First, a million or more well-fed mammoths, along with many other types of mammals, lived in a climate much warmer than at present, and with no permafrost (partially frozen, boggy top layer of soil a few feet thick and frozen underneath). Second, the climate became much colder, resulting in the death of the mammoths and the preserving of their remains in permafrost which developed at the same time. The cooling was relatively rapid (otherwise, the mammoths would have been able to migrate out of Siberia), but not so rapid as to prevent most of the other animals from escaping. Third, since there are so few frozen carcasses, the catastrophe was not a regional quick freeze, as some popular accounts suggest. Most mammoth carcasses decomposed before burial, allowing enough time for normal decay. Fourth, after burial, the soil remained frozen to this day. The climate change to colder conditions was permanent. Taken together, the evidence indicates that the climate change was a relatively rapid and permanent shift from mild weather to a very cold climate. The climate at the end of

a post-Flood, rapid ice age answers most of the questions surrounding the death of the woolly mammoth in Siberia and Alaska.²⁶

Michael Oard and his wife, Beverly Oard, in their entertaining and less technical book titled, *Life in the Great Ice Age*, make a few straight-forward conclusions:

1. There is little evidence of many ice ages on land. Practically all of the Ice Age debris is from only one ice age.
2. Summers need to cool 20-40° F to cause an ice age. It is easier to understand this much cooling with the unique climatic conditions that followed the Flood. But how could these same conditions occur 15 times or more in a row?
3. Wisconsin was never glaciated. It seems much easier to explain this unglaciated area using one ice age, than many. Surely, if 15 or more ice ages occurred, one of them would have glaciated southern Wisconsin.
4. The Ice Age ended not too long ago. This is based on the appearance of the glacial debris. Most of the debris looks very fresh, as if it were deposited a short time ago as the glistening polished rocks around Hudson Bay after a rain attest. This shows the ice disappeared a short time ago, and not about 10,000 to 15,000 or more years ago as naturalistic evolutionists believe.
5. Many evolutionary scientists believe there will be another ice age. They believe we have had many ice ages in the past, so there will be more in the future. In fact, some believe the next ice age is due soon!
6. The reason evolutionary scientists believe another ice age is coming is that many do not believe the Bible, and they try to guess about the future.

The Oards conclude by stating, “The Bible says the Flood in Noah’s day was a one-time event. It was the Flood that disrupted the climate so much that it provided the conditions for the Ice Age. God gave us the rainbow as a promise that He will never again send a worldwide flood. Therefore, there can never be another ice age.”²⁷

I, too, having been trained to teach the sciences, believe it is highly unlikely for these “just-right” conditions to occur again outside of the unique conditions caused by the catastrophic events of the worldwide Flood of the Bible. The scientific observations and evidences presented in this article on the Ice Age, taking into account the historical documentation of the worldwide Flood as recorded in Genesis chapters 7 and 8 of the Bible, help me to understand the truth of the Bible and show me that truly objective, unbiased scientific pursuit and observations do not conflict with the creation account of the Bible. We can be scientists and believe and see that the scientific evidences do support the creation account

of the Bible and that God's special creation, mankind, was created very special, not evolved over millions of years as naturalistic evolutionists would have us to believe, even dismissing that there is a Creator, God. In Dr. Henry Morris's book, *Men of Science, Men of God—Great Scientist Who Believed the Bible*, he gives a brief biography of over 100 Christian scientists (among them Johann Kepler, Isaac Newton, Louis Pasteur, George Washington Carver, Warner von Braun) who believed the Bible. Johann Kepler, founder of physical astronomy, established the motto, "thinking God's thoughts after Him", which he and many believing scientists adopted in their efforts to unlock the scientific principles of nature.²⁸ These scientific principles can truly enhance all of our lives through that recognition of our all powerful Creator, God, and can allow us to receive His blessings. I, as I hope you too, have received a blessing from the scientists, Michael and Beverly Oard, as I believe they have used this motto in helping us to understand the great Ice Age as a result of the Genesis Flood. ❧

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 - ¹⁷ Same as reference no. 6
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- ²⁵ Oard, Michael J. (1990) 127, 128
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COMING EVENTS

Thursday, September 9, 7:30 P.M., Providence Baptist Church, 6339 Glenwood Ave., Raleigh.

Mark Stephens, Chairman of TASC, will share more of his experiences and pictures of magnificent animals from the Galapagos Islands trip that he took with the Institute for Creation Research. He will discuss, "Did Darwin Really See Evolution in Action" on the Galapagos Islands and what are some of the conclusions of the creation scientists about these islands. So come out and experience the Galapagos Islands without having to travel there yourself! And bring a friend!

Thursday, October 14, 7:30 P.M., Providence Baptist Church, 6339 Glenwood Ave., Raleigh

Topic to be announced.

TASC WILL PRESENT TO YOUR GROUP

The following are presentations that TASC is able to present to your church, club, or school group. Just contact us for scheduling.

Evidences for Creation in Contrast to Evolution - C. Gerald Van Dyke, PhD

A slide presentation of the major areas of evidences for Creation, including fossils, geology, natural laws, The Flood, and more, comparing and contrasting the scientific evidences for Creation vs. evolution: an entertaining and informative presentation.

Origin of Life - C. Gerald Van Dyke, PhD

The real facts about the origin of life experiments, what are the possibilities that life originated from non-life? What are the Creation implications of life forming from God speaking as the Bible says? How can DNA be formed without proteins and how can proteins be formed without DNA? Time to bring your questions for an entertaining and informative presentation.

Evidences for the Worldwide Flood - C. Gerald Van Dyke, PhD

Evidences for Creation and Intelligent Design- Dan Reynolds, PhD

We will discuss the theology and science of creation. We will touch upon the duration of Creation Week in Genesis 1, abiogenesis, information in the biological world, micro- and macroevolution, rapid geologic processes, radiometric dating, evidences for a recent creation, and a creationist cosmology

Icons of Evolution - Dan Reynolds, PhD

This talk is based on the book *Icons of Evolution: Science or Myth* by Jonathan Wells, Ph.D. (Regnery Publishing, Inc., 2000; ISBN: 0-89526-276-2). Dr. Wells (who holds a Ph.D. from UC at Berkeley in molecular and cell biology) clearly explains how many of the "proofs" (icons) of evolution being taught in current secondary school and college biology textbooks have been disproved, are fraudulent, or are speculative at best. More disturbing is that many leading evolutionary scientists are fully aware of this but have done little to correct the situation. Indeed, some feel that introducing such "controversial" revelations into the classroom, though true, would only "confuse" students. The "icons" include the Miller-Urey experiment on the origin of life, Darwin's tree of life, homology of vertebrate limbs, Haeckel's embryos, Archaeopteryx, peppered moths, Darwin's finches, horse evolution, and human evolution. Additional related material is included.

Not by Chance - Dan Reynolds, PhD

This talk is based on the book *Not By Chance! Shattering the Modern Theory of Evolution* by Lee Spetner (The Judacia Press, Inc., 1998; ISBN 1-880582-24-4). Dr. Spetner persuasively shows through sound theoretical calculations, population genetics, biochemistry, and information theory that the proposed Neo Darwinian evolutionary mechanism for macroevolution of random mutations acted upon by natural selection does not work. He cites many documented examples of where changes in the phenotype were a function of gene activation/expression and not associated with a change in the genome. He concludes that much of the alleged fossil evidence for evolution may merely reflect an organism's genetically built-in ability to respond to environmental factors by selective gene activation/repression and not by generation of new genetic information.

Creation and Information -Dan Reynolds, PhD

The biological world is full of information at the molecular level, but how did it get there? Are the laws of chance, chemistry, and physics plus time adequate to generate the complex information found in the genetic code? Scientists have now developed a means to empirically detect the signature of intelligent design in biochemistry. When this "explanatory filter" is used to analyze DNA and proteins, design is detected and natural processes are ruled out! We will discuss information theory, complex specified information, and irreducible complexity as applied to the chemistry of life. This talk is based primarily upon the writings of William Dembski, Michael Behe, and Lee Spetner.

Creation and Astronomy - Dan Reynolds, PhD

There are many evidences for design and a recent creation in astronomy and physics. We will discuss these evidences as well as a "white hole" cosmology based on Genesis and relativity theory which explains how we can see stars billions of light years away from a young earth.

Rapid Geologic Processes and Radiometric Dating - Dan Reynolds, PhD

Geologists have discovered that many of the processes once thought to require millions of years can be accomplished in much shorter time spans. Examples of rapid geological processes include formation of Precambrian granites (“basement” rocks of the continents), deposition of sedimentary layers, formation of successive sedimentary strata, canyon formation, coal formation, decay of planetary magnetic fields, formation of petrified forests, stalagmite and stalactite formation, and rapid tectonic plate migration. Perhaps most important, there is now solid evidence for rapid radioactive decay in the past. Come learn why believing in a young earth is sound theologically and scientifically.

Strengthening Our Faith in God, our Creator - Mark Stephens, MCS

This presentation differentiates the beliefs on origins including divine creation, naturalistic evolution, and theistic evolution. Evidences that support God as our Creator are examined from the Bible, biology, chemistry, and astronomy. The attendee is challenged to build a knowledge of creation science to strengthen one’s own faith, to avoid being deceived, and to be a more effective witness for God and Christ in this more “sophisticated, scientific” world.

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