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COULD THE ICE AGE HAVE BEEN CAUSED BY THE GENESIS FLOOD?

By Mark Stephens, MCS

This is part one of a two part article concerning the Ice Age caused by the Genesis Flood: August issue, "The Build-up"; September issue, "The Melt-down".

As I recall, the conversation went something like this. "That glacier up there is 30,000 years old," said our boat captain and guide as I, along with some other tourists, observed the sites in our chartered boat in Prince William Sound close to Valdez, Alaska, in early September 1998. Enthralling us more, our guide told us, "Interestingly, scientific observers have noted that the glacier has experienced unusual melt-down that has caused it to recede seven miles in the last 10 years." I did some quick math: $30,000 \text{ years} / 10 \text{ years} = 3,000$ and $3000 \times 7 \text{ miles} = 21,000$ miles that the glacier would have moved at that rate in 30,000 years and said to our captain and guide, "At the rate you have stated that the glacier moved, it could have just about traveled around the world (25,000 miles) in 30,000 years. I am a creation scientist and I believe that the glacier is more like 4,000 to 5,000 years old and is subject to fast, catastrophic events rather than uniformitarian assumptions made by naturalistic evolutionary scientists by whom you possibly inform us." It was not long that another man along with us piped up and stated to our guide, "You know, I support what this man has stated. It's just as plausible and scientific as what you have stated." Thus, there followed a conversation amongst some of us tourists about the different so-called "facts" of science based on naturalistic evolutionary thinking that the public is provided typically by guides in our national parks compared to other valid scientific observations based on a creation science view.

With some of my live experience and narrative from the above as a stimulus, let us examine some of the scientific observations that support the Ice Age as caused by the Genesis Flood. I will reference much of the scientific data used in this article from a book by Michael J. Oard titled, *An Ice Age Caused by the Genesis Flood*.¹ For more in depth scientific data and study than can be provided in

this short article, you may wish to acquire a copy of this book by calling the Institute for Creation Research (ICR) at 800-628-7640 or come out and purchase a copy at our monthly meeting of TASC.

In his forward to the above book, R. H. Brown, a creation scientist, points out that up to the 1990s, the creationist literature has been critically deficient with respect to interpretation of the evidence for continental glaciation. Michael J. Oard has made a major contribution, in opening up vistas for a sound understanding of the evidence of continental glaciation from the perspective of Biblical testimony. Oard has been equipped for this contribution by his competence as a professional meteorologist, exhaustive study of the scientific evidence related to glaciation, and confidence that Moses recorded only accurate historical data. Brown states that, "On the basis of the principle that the Creator is a model of truthfulness and consistency, it should be possible to find sound interpretations of His works that are fully consistent with the testimony given in His Word...the seventh and eighth chapters of the book of Genesis specify a catastrophe (the Genesis or Noahic Flood) that completely transformed the surface of planet Earth. Data in the eleventh chapter of Genesis, together with data in I Kings 6:1; Exodus 12:40,41; Genesis 47:9, 25:26, 21:5, and 12:4, place this catastrophe somewhere between about 4,300 years ago (2300 B.C.) and 5,400 years ago (3400 B.C.)..."²



Michael J. Oard

In his book, Michael Oard contrasts the scientific data supporting the causes of the Ice Age by comparing the catastrophic events (rapid changes over a few hundred to thousands of years) of the worldwide Genesis Flood to the uniformitarian events (slow, gradual changes over tens to hundreds of thousands to millions of years) theorized by naturalistic evolutionists. Brown concludes his

forward to Oard's book by pointing out that Biblical creationists will be gratified by the detailed extent to which data in the Bible produce a (weather) climate model with which Oard gives a scientifically sound explanation for continental glaciation as a result of events from the worldwide flood. As background to this article and to vividly implant on our minds the magnitude of the beginning of the events of the great catastrophe of the worldwide flood, let's refer to those events as recorded in Genesis 7:11-12. "In the six hundredth year of Noah's life, in the second month, the seventeenth day of the month, the same day were all the fountains of the great deep broken up, and the windows of heaven were opened. And the rain was upon the earth forty days and forty nights."

Another book that I reference in this article is *Life in the Great Ice Age*³ by Michael Oard and his wife, Beverly Oard. This book is much less technical than the former and weaves an ice age story for children and adults with only moderate science background while examining which scientific data and observations are more valid, the naturalistic evolutionary view or the creation science view that supports the Genesis Flood account and our Creator, God.

Let us take a look briefly at some of the conclusions that Michael Oard reports⁴ based upon his scientific data and meteorological observations with his subsequent understanding that the Ice Age could be caused by the Genesis Flood. According to Oard, the requirements for glaciation for an ice age are a combination of much colder summers and higher snowfall in winters. Over 60 theories of the Ice Age have been offered in the past, and all have serious deficiencies, including the currently popular astronomical theory. Oard proposes that the mechanism for the Ice Age is catastrophic and is not based on the uniformitarian principle. Specifically, the Ice Age is treated as a consequence of the Genesis Flood, which disrupted the climate to such a degree that an ice age developed immediately afterwards for a build-up of glaciation for about 500 years and a melt-down of about 200 years for a total post-Flood ice age of about 700 years.⁵ The Genesis Flood has never been proved to be a fable. It has only been assumed so by some men of science over the past 200 years or more. There is ample evidence that a gigantic flood once inundated the earth. For example, many sedimentary layers were laid down quickly by huge, powerful currents, with little or no sign of erosion between layers. Well over 100 flood traditions, in cultures from all over the world add support. The Bible clearly specifies that the Flood was global, not regional or local.⁶

As stated above there have been many ideas and theories on the cause and number of ice ages. A good theory is one that best fits the physical evidence. Noah's Flood

and the changes in the climate due to volcanic ash and warmer oceans best explain the cause and development of the Ice Age.⁷

The Ice Age affected all the world, especially the middle and high latitudes. In Europe, glaciers developed on the mountains of Norway and Sweden. Because the nearby ocean water was warm, it took many years before these mountain glaciers spread downward into the lowlands of those countries. Eventually, as the oceans gradually cooled, the snow and ice covered all of what is now northern and central England, Denmark, northern Germany, northern Poland, and northwest Russia. Ice covered nearly all of Canada and much of the northern United States, as well. The snow and ice extended all the way into northern Missouri. A gigantic ice sheet eventually covered Greenland and the continent of Antarctica. Smaller ice caps covered the Swiss Alps and other mid- and high-latitude mountain ranges of the world. Volcanic dust in the stratosphere due to multitudes of volcanic eruptions during the catastrophe of the Biblical Flood—after all, the events of this Flood were intended to destroy the earth—also cooled the tropics. Thus, many tropical mountains had ice caps at the summits. Some may think that an ice age needs colder winters. However, winters now are cold enough. In present-day Siberia, winters are bitter cold, but there is no ice sheet there. What is really required is much cooler summers so the snow would not melt. Also, winters would need to be much wetter—so wet that snow would pile high. Because of much cooler summers and more snow, the winter snow would grow deeper each year. After several years, the weight of the snow would cause it to compress and turn into ice.⁸

Considering the above, the Genesis Flood provides the initial conditions for the Ice Age. Since the Flood was associated with extensive volcanic eruptions, a vast shroud of volcanic dust and aerosols would have remained in the atmosphere for several years afterwards. Water for the Flood erupted from below the ground, in the "fountains of the great deep." The hot water from the deep would mix with the pre-Flood ocean, which itself probably was relatively warm compared to today. The tremendous earth upheavals associated with the fountains of the deep and the draining of the Flood waters would have mixed the ocean water. Consequently, the ocean would likely have been universally warm from pole to pole, and from top to bottom, at the end of the Flood.⁹

Cooling mechanisms caused by the Flood, in combination with a universally warm ocean, would result in a snowblitz, or a rapid ice age. Volcanic dust and aerosols would provide the main summer cooling over the mid- and high-latitude continents, by reflecting a relatively large percentage of the summer sunshine back to space.

Once a permanent snow cover becomes established, even more solar radiation is reflected back, reinforcing summer cooling caused by volcanism. Snow-cover cooling is especially effective over barren ground, which would have been characteristic immediately after the Flood. More cloudiness, caused by higher mid- and high-latitude moisture, would most likely reinforce the cooler summers. Carbon dioxide, due to volcanism and the decay of vegetation, would have been very high right after the Flood, countering the cooling mechanisms somewhat, but it would have decreased rapidly as the Ice Age progressed, providing a supplementary cooling mechanism later on as the other cooling mechanisms waned.

For the ice age to progress, sustained cooling of the mid- and high-latitude continents is required. The volcanic dust and aerosols from the Flood would have settled out in a few years, but abundant volcanism, at a much higher rate than we have observed in the recent 200 years, would continue the volcanic cooling. A large array of geological evidence attests to these large ice-age eruptions. The other cooling mechanisms would have continued in operation.

The ocean adjacent to the developing ice sheets, and in the path of storms, would continue to be warm, due to a vigorous horizontal and vertical ocean circulation. As the water was cooled by evaporation and by contact with cold continental air, it would become more dense and sink, being replaced by warmer water from deeper in the ocean. Ocean currents set up along the east coasts of Asia and North America would continually transport warmer water northward. As the deeper ocean cooled, the ocean surface and atmosphere at mid and high latitude would slowly cool, as the Ice Age progressed and the ice sheets expanded. Mountain icecaps in many areas would coalesce and spread to lower elevations.

One uniformitarian ice-age puzzle that has lasted for 200 years is the observation that cold tolerant animals, like the reindeer, lived with warm tolerant animals, like the hippopotamus. The latter even migrated into northern England, France, and Germany during the Ice Age. A post-Flood ice age can account for this unique distribution of animals, since winters would be mild and summers cool. And, also, northwest Europe would have been relatively warm at first because of the surrounding warm ocean and the generally westerly onshore flow of air. Land bridges, for instance, across the Bering strait and the English Channel, would have aided rapid animal dispersion after the Flood¹⁰ with human dispersion to follow.

The climate of Siberia and Alaska would have been mild during the Ice Age. The Arctic Ocean not only was not covered by sea ice, but it also was relatively warm dur-

ing the ice age. Temperatures over the surrounding continents would have been significantly warmer than at present as a result.¹¹ The warm North Atlantic and North Pacific also would have contributed to the warmth in these regions, and precipitation would have been higher. Consequently, the woolly mammoth and many other types of animals would have found a suitable home, with adequate food, in Siberia and Alaska.¹² We propose this happened by the remains of millions of their bones and even preserved carcasses in the ice as a result of rapidly colder temperatures at the end of the Ice Age.¹³

Due to the unique post-Flood climate, glacial maximum is reached very rapidly—in about 500 years. This figure is based on the length of time the controlling conditions likely operated. The main variable determining this time span is the ocean warmth, which made very abundant moisture available. Once the ocean cooled to some threshold temperatures, the supply of moisture would critically decline, and deglaciation would begin. According to Michael Oard, the time needed to cool the ocean can be determined from the oceanic and atmospheric heat-balance equations applied to the post-Flood climate. Speculation is inherent in such an estimate. As a result, maximum and minimum estimates of the most important variables were used. The initial average ocean temperature following the Flood was assumed to be 30° C, and the threshold temperature, at maximum glaciation, was estimated to be 10° C. The time to reach maximum glaciation ranged from 174 to 1,765 years—a very short time, compared to uniformitarian estimates. Both these figures are extremes. The best estimate is probably about 500 years.¹⁴

In summary, Michael Oard points out that the Genesis Flood is the basis for the post-Flood ice-age model. Since this model can explain the development of ice sheets and offer viable solutions to many outstanding ice age mysteries, the Flood should offer a firmer foundation for pre-glacial, earth history. If the principle of uniformitarianism of naturalistic evolution cannot explain the most recent geological period, it should not be the basis for all other geological periods.

Since uniformitarianism is unable to solve many mysteries of the past, it should be discarded, along with its accompanying theories—the theory of evolution and an old earth. A revolution or paradigm change in historical science would result. Many research conclusions would be rethought. The contribution to science and to life would be overwhelmingly positive. The situation remains, however, that new scientific data relating to earth history is published each year. Most of these data are incorporated within the uniformitarian paradigm, whether the data fit or not. Care must be exercised in using these data, since data collection and/or presentation is often biased by theory. Much new, as well as old

scientific data, need reinterpreting within a Creation-Flood paradigm. This cannot be accomplished quickly. Thousands of uniformitarian scientists have spent over 150 years and billions of dollars on the uniformitarian model of earth history. Patience is needed to decipher the information on a particular subject. Creationists, as well as others, must be careful not to jump to conclusions too quickly. Not every mystery of the past will be solved. But with time and effort, many aspects of the Creation-Flood paradigm can be filled in and will result in a far superior model of the prehistoric past.¹⁵

Michael Oard concludes by declaring, "A post-Flood, rapid ice age supports the Genesis Flood, which further supports the historicity of the Bible. It also adds credence to the God of the Bible and to the spiritual message in the Bible. A God who has control of the earth, can cause a global Flood, and [can] allow an ice age is very powerful. He is even more powerful and intelligent for having created the entire universe. He is a master mathematician, engineer, and artist. Only the God of power and love described in the Bible is up to the task."¹⁶ ❧

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¹ Oard, Michael J. (1990) *An Ice Age Caused B.y the Genesis Flood*, Institute for Creation Research, El Cajon, CA
² B.rown, R. H. (1990) in Foreword to: Oard, Michael J., *An Ice Age Caused B.y the Genesis Flood*, Institute for Creation Research. El Cajon, CA, xi-xii
³ Oard, M. and Oard, B. (1993) *Life in the Great Ice Age*, Master Books, Green Forest, AK, p. 72
⁴ Oard, M. J. (1990) pp. 187-197
⁵ Oard, M. J. (1990) pp. 190-191
⁶ Oard, M. J. (1990) pp. 187-188
⁷ Oard, M. and Oard, B. (1993) p. 62
⁸ Oard, M. and Oard, B. (1993) pp. 62-63

⁹ Oard, M. J. (1990) p. 188
¹⁰ Oard, M. J. (1990) pp. 188-189
¹¹ Newson, R. L. (1973) Response of a General Circulation Model of the Atmosphere to Removal of the Arctic Ice-Cap, *Nature* **241**: 39-40
¹² Oard, M. J. (1990) p. 190
¹³ Oard, M. and Oard, B. (1993) p. 67
¹⁴ Oard, M. J. (1990) p. 190
¹⁵ Oard, M. J. (1990) pp. 196-197
¹⁶ Oard, M. J. (1990) p. 197

COMING EVENTS

Thursday, August 12, 7:30 P.M., Providence Baptist Church, 6339 Glenwood Ave., Raleigh.

The Origin of Humans. New video by Mike Riddle of Institute for Creation Research. Examine the so-called naturalistic evolutionary evidences and refutations of man's origin. The following will be covered:

- Four famous mistakes
- Neanderthals
- Lucy and the australopithecines
- A case study on mutation rates

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

Topic to be announced.

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