

Chapter 31

Impact Winter Would Decimate the Biosphere

The Cenozoic era was subjected to massive impacts from asteroid and/or comets as well as the huge volcanism. Impacts would add to volcanic biosphere pollution contributing to a freezing post Flood Earth.¹

Cenozoic Impacts

As of 2011, 182 impacts had been reported by scientists² with several impact sites added each year. Phanerozoic rocks contain 155 and Precambrian rocks have 27 known or claimed impacts. Sixty of these impacts are in the Cenozoic. Table 31.1 lists the location, diameter, and supposed age of all Cenozoic craters larger than 0.6 miles (1 km), including the Chicxulub impact crater at the very start of the Cenozoic. There are 38 total impacts in the Cenozoic, some with quite large diameters, such as Kara-Kul, Tajikistan, at 32.5 miles (52 km); Chesapeake Bay, Virginia, U.S., at 25 miles (40 km); Popigai, Russia, at 56 miles (90 km); Mistasin, Canada, at 17.5 miles (28 km); Haughton, Canada, at 14 miles (23 km); Logancha, Russia, at 12.5 miles (20 km); Kamensk, Russia, at 16 miles (25 km); and Montagnais, Nova Scotia, Canada, at 28 miles (45 km). I am puzzled by the low diameter of the Chesapeake Bay impact, which Wayne Spencer and I studied.³ The buried crater is supposed to be 53 miles (85 km) in diameter according to the researchers that we studied, more than twice the diameter given in Table 31.1. I have no idea why the numbers are so different.

Climatic Effects of Impacts

The Chicxulub impact crater on the Yucatán Peninsula of southern Mexico at the supposed Cretaceous/Tertiary (K/T.) boundary was added to Table 31.1 for comparison, since this is the one that allegedly killed off all the dinosaurs worldwide in a mass extinction. Its diameter is listed as 94 miles (150 km), but its size is in question. Early estimates of the size of the Chicxulub impact were around 188 miles (300 km), but the figure listed is now likely correct.⁴ The larger diameter may be a measure of one of the multiple rings produced by this impact. It is believed by some scientists that the Chicxulub impact could not have wiped out the dinosaurs,⁵ but the majority of evolutionary/uniformitarian scientists think it did, mainly because they need a mechanism for mass extinction at that time. I will use this impact as a comparison for the decimation of the biosphere by Cenozoic impacts.

Impacts would blast a lot of particles up into the upper atmosphere and beyond, which would reflect some of the sunlight back to space. Although the particles from an impact would settle out

¹ Roy Holt, personal communication.

² <http://www.passc.net/EarthImpactDatabase/Agesort.html>

³ Spencer, W.R. and Oard, M.J., 2004. The Chesapeake Bay impact and Noah's Flood. *Creation Research Society Quarterly* 41(3):206–215.

⁴ Morgan, J., Warner, M., and Grieve, R., Geophysical constraints on the size and structure of the Chicxulub impact crater; in: Koeberl, C. and MacLeod, K.G. (Eds.), *Catastrophic Events and Mass Extinctions: Impacts and Beyond*, GSA Special Paper 356, Geological Society of America, Boulder, CO, pp. 39–46.

⁵ Oard, M.J., 2004. Is the demise of the dinosaurs by a Yucatán impact a myth? *Journal of Creation* 18(1):6–8.

Location	Diameter (Km)	“Age” (millions of years)
Tenoumer, Mauritania	1.9	0.02
Barringer, Arizona, U.S.	1.18	0.05
Lonar, India	1.83	0.05
Xiuyan, china	1.8	>0.05
Rio Cuarto, Argentina	4.5	~0.1
Tswaing, South Africa	1.13	0.22
Zhamanshin, Kazakhstan	14	0.9
Bosumtwi, Ghana	10.5	1.07
New Quebec, Canada	3.44	1.4
Talemzane, Algeria	1.75	~3.0
Elgygytgyn, Russia	18	3.5
Roter Kam, Namibia	2.5	3.7
Kara-Kul, Tajikistan	52	~5.0
Karla, Russia	10	5.0
Bigach, Kazakhstan	8	5.0
Colônia, Brazil	3.6	5 to 36
Steinheim, Germany	3.8	15
Ries, Germany	24	15.1
Chesapeake Bay, Virginia, U.S.	40	35.5
Popigai, Russia	90	35.7
Flaxman, Australia	10	>35
Crawford, Australia	8.5	>35
Mistasin, Canada	28	36.4
Wanapitei, Canada	7.5	37.2
Haughton, Canada	23	39
Logancha, Russia	20	40
Beyenchime-Salaatin, Russia	8	40
Logoisk, Belarus	15	42.3
Shunak, Kazakhstan	2.8	45
Ragozinka, Russia	9	46
Chiylı, Kazakhstan	5.5	46
Kamensk, Russia	25	49
Gusev, Russia	3	49
Goat Paddock, Western Australia	5.1	~50
Montagnais, Nova Scotia, Canada	45	50.5
Jebel Waqf as Suwwan, Jordan	5.5	56 to 37
Marquez, Texas, U.S.	12.7	58
Connolly Basin, Western Australia	9	~60
Chicxulub, Mexico	150	64.98

Table 31.1. Location, diameter, and supposed age of 38 Cenozoic impacts and the Chicxulub impact at the supposed K/T boundary.²

quicker than volcanic aerosols, the effect of the particles would likely last around six months and result in “meteorite impact winter.”⁶

It is unknown how many very small particles the size of volcanic aerosols, would result from an impact and its climatic effect. The smaller the particles, the longer they would remain in the upper atmosphere with their resultant climatic effect. Regardless, the climatic effect would be somewhat similar to volcanic winter, but of shorter duration.

The Flood/Post-Flood Boundary Is in the Late Cenozoic

According post-Flood catastrophism, the Cenozoic lasted for a few hundred years after the Flood. The Cenozoic impacts listed are quite a bit smaller than the Chicxulub impact, but nevertheless, over 38 known impacts with craters over 0.6 miles (1 km) would have struck in those few hundred years. Some, like the Chesapeake Bay and Popigai impacts, would have been quite devastating.

The likely effect of impacts on the biosphere would still not be as great as volcanism, and impacts by themselves would not eliminate the biosphere. However, when added to what was already a volcanic winter, they would help to create a perpetual early post-Flood winter. It would be difficult for plants to germinate in these conditions let alone survive until the biosphere cleared. The food chain would be broken and the animals would starve.

A Cenozoic post-Flood volcanic winter is just as improbable as subtropical to tropical plants and animals living in the mid and high latitude continents after the Flood. The most logical scenario is most of the Cenozoic sediment was deposited by the Flood, and Cenozoic volcanism and impacts took place during the Flood. The warm climate vegetation was buried by the Flood and was not *in situ* growth.

⁶ Toon, W.B., Turco, R.P., and Covey, C., 1997. Environmental perturbations caused by the impacts of asteroids and comets. *Reviews of Geophysics* 35(1):41–78.