

## Intelligent Design Refutation

To get a gauge of just how inane the belief in intelligent design is in the 21st Century, here are some areas they must ignore, any one of which proves beyond rational argument that, not surprisingly, the World did not start about 6,000 years ago at the behest of the Judeo-Christian god, with one man, one woman and a talking snake.

First and most obviously is the fossil record. The fossil record is much, much more than just dinosaurs. Indeed, dinosaurs only get the press because of their size, but they make up less than 1% of the entire fossil record. Life had been evolving on Earth for over 3 thousand million years before dinosaurs evolved and has gone on evolving for 65 million years after the Chicxulub meteor wiped them out.

The fossil record includes the Stromatolites, colonies of prokaryotic bacteria, that range in age going back to about 3 billion years, the Ediacara fossils from South Australia, widely regarded as among the earliest multi-celled organisms, the Cambrian species of the Burgess shale in Canada (circa – 450 million years) the giant scorpions of the Silurian Period, the giant, wingless insects of the Devonian period, the insects, amphibians, reptiles; fishes, clams, crustaceans of the Carboniferous Period, the many precursors to the dinosaurs, the dinosaurs themselves, the subsequent dominant mammals, including the saber tooth tiger, the mammoths of North America and Asia, the fossils of early man in Africa and the Neanderthals of Europe.

The fossil record shows a consistent and worldwide evolution of life on Earth dating back to about 3,500,000,000 years ago. There are literally millions of fossils that have been recovered, of thousands of different species and they are all located where they would be in the geological record if life evolved slowly over billions of years. None of them can be explained by a 6,000 year old Earth and Noah's flood. Were they all on the ark? What happened to them when it docked?

Lions, tigers, bears, and wolves eat a lot of food – meat- which means its food would itself have to have been fed, like the food of every other carnivore on the ark. A bit of “back of the envelope” math quickly shows that “Noah's Ark” would actually have to have been an armada of ships bigger than the D Day invasion force, manned by thousands and thousands of people – and this is without including the World's 300,000 current species of plants, none of which could walk merrily in twos onto the Ark.

Secondly, there are those little things we call oil, natural gas and other fossil fuels. Their mere existence is another, independent and fatal blow to the creationists. Speak to any geologist who works for Exxon Mobil, Shell or any of the thousands of mining, oil or natural gas related companies that make a living finding fossil fuels. They will tell you these fossil fuels take millions of years to develop from the remains of large forests (in the case of coal) or tiny marine creatures (in the case of oil). That's why they are called fossil fuels. Have a close look at coal, you can often see the fossilized leaves in it. The geologists know exactly what rocks to look for fossil fuels in, because they know how to date the rocks to millions of years ago. Creationists have no credible explanation for this (nor for why most of it was “given to the Muslims”).

Thirdly, most of astronomy and cosmology would be wrong if the creationists were right. In short, as Einstein showed, light travels at a set speed. Space is so large that light from distant stars takes many years to reach the Earth. In some cases, this is millions or billions of years. The fact that we can see light from such far away stars means it began its journey billions of years ago. The Universe must be billions of years old. We can currently see galaxies whose light left home 13.7 billion years ago. Indeed, on a clear night, one can see many stars more than 6,000 light years away with the naked eye, shining down like tiny silent witnesses against the nonsense of creationism.

Fourthly, we have not just carbon dating, but also all other methods used by scientists to date wood, rocks, fossils, and other artifacts. These comprehensively disprove the Bible's claims. They include uranium-lead dating, potassium-argon dating as well as other non-radioactive methods such as pollen dating,

dendrochronology and ice core dating. In order for any particular rock, fossil or other artifact to be aged, generally two or more samples are dated independently by two or more laboratories in order to ensure an accurate result. If results

were random, as creationists claim, the two independent results would rarely agree. They generally do. They regularly reveal ages much older than Genesis. Indeed, the Earth is about 750,000 times older than the Bible claims.

Fifthly, the relatively new field of DNA mapping not only convicts criminals, it shows in undeniable, full detail how we differ from other life forms on the planet. For example, about 98.4% of human DNA is identical to that of chimpanzees, about 97% of human DNA is identical to that of gorillas, and slightly less again of human DNA is identical to the DNA of monkeys. This gradual divergence in DNA can only be rationally explained by the two species diverging from a common ancestor, and coincides perfectly with the fossil record. Indeed, scientists can use the percentage of DNA that two animals share (such as humans and bears, or domestic dogs and wolves) to get an idea of how long ago the last common ancestor of both species lived. It perfectly corroborates the fossil record and is completely independently developed. It acts as yet another fatal blow to the “talking snake” theory.

Sixthly, the entire field of historical linguistics would have to be rewritten to accommodate the Bible. This discipline studies how languages develop and diverge over time. For example, Spanish and Italian are very similar and have a recent common “ancestor” language, Latin, as most people know. However, Russian is quite different and therefore either did not share a common root, or branched off much earlier in time. No respected linguist anywhere in the World traces languages back to the Tower of Babel, the creationists’ explanation for different languages. Indeed, American Indians, Australian Aborigines, “true” Indians, Chinese, Mongols, Japanese, Sub-Saharan Africans and the Celts and other tribes of ancient Europe were speaking thousands of different languages thousands of years before the date creationists say the Tower of Babel occurred – and even well before the date they claim for the Garden of Eden.

Seventhly, lactose intolerance is also a clear vestige of human evolution. Most mammals only consume milk as infants. After infancy, they no longer produce the enzyme “lactase” that digests the lactose in milk and so become lactose intolerant. Humans are an exception and can drink milk as adults – but not all humans – some humans remain lactose intolerant. So which humans are no longer lactose intolerant? The answer is those who evolved over the past few thousand years raising cows. They evolved slightly to keep producing lactase as adults so as to allow the consumption of milk as adults. This includes most Europeans and some Africans, notably the Tutsi of Rwanda. On the other hand, most Chinese, native Americans and Aboriginal Australians, whose ancestors did not raise cattle, remain lactose intolerant.

I could go on and elaborate on a number of other disciplines or facts that creationists have to pretend into oblivion to retain their faith, including the Ice Ages, cavemen and early hominids, much of microbiology, paleontology and archeology, continental drift and plate tectonics, even large parts of medical research (medical research on monkeys and mice only works because they share a common ancestor with us and therefore our fundamental cell biology and basic body architecture is identical to theirs).

In short, and not surprisingly, the World’s most gifted evolutionary biologists, astronomers, cosmologists, geologists, archeologists, paleontologists, historians, modern medical researchers and linguists (and about 2,000 years of accumulated knowledge) are right and a handful of Iron Age Middle Eastern goat herders were wrong.