## **Elephants** The Giant Wonder

he African elephant is the largest living terrestrial mammal, even larger than most dinosaurs. Its mammoth size means their primary enemy is humans, not the major carnivores, such as lions, that inhabit its homeland. The largest recorded African elephant reached 12 feet (four meters) at the shoulder and weighed over ten

> tons. Called "nature's masterpiece" and "skilled engineers"



elephants are one of "the most intelligent of domesticated animals." (Redmond, 1993, p. 6).

Three elephant species are currently recognized: the African bush elephant (Loxodonta africana), the African forest elephant (L. cyclotis), and the Asian elephant (Elephas maximus). African elephants thrive in eastern, southern and western Africa. Also, many extinct elephants once roamed the earth, including the mammoths and mastodons. (Redmond, 1993, p. 10). They are all herbivorous and found in many different habitats including savannahs, forests, deserts, and marshes that contain abundant grasses and other plant foods.

The main differences between the African and Asian varieties include the fact that African elephants are larger, fiercer, and have much larger ears and concave backs while Asian elephants have much smaller ears and convex or level backs. Asiatic elephants were domesticated centuries ago and are the most common species used in circuses (Moody, 1970, p. 217).

#### The Trunk

An example of the many wonders of elephants is the trunk, formally called a proboscis, thus they are classified in the order Proboscidea. Close to 150,000 muscles are used in its trunk. about 230 times the number of muscles in the average human. This complex muscle system allows the trunk to move in almost any direction. The trunk functions as a nose to breathe, but also to drink, and as a pump to pull water into its body as well as to spray water out to clean itself and clear insects from its body (Ault, 2016, p. 106). It also functions as a snorkel to allow an elephant to breathe when under as much as 6 feet of water. Its most

well-known function is as a hand to put food in its mouth, as well as to lift and carry a wide variety of weights. It is sensitive enough to pick up a peanut, even a pin, or uncork a bottle, yet strong enough to rip a branch from a tree or lift up to 600 pounds (270 kg). The trunk's self-repairing placed muscle system

Continued on Page 4

### **Important Answers** to Good Questions

Dr. John Byl's keynote lecture at Creation Weekend on the evening of Saturday, October 21, 2017 was entitled "Has Science Killed God? Christianity vs. Naturalism." Many people in our modern society, Dr. Byl declared, believe that science can explain everything, so that God is not needed. These people accept that physical laws leave no room for God. Well then, said Dr. Byl, let us evaluate this position.

He began by informing us that we must distinguish between the actual facts – the observed data – and scientific theories that are constructed to explain facts.

In many cases, Dr. Byl pointed out, observa-

tions from nature lead to very uncertain conclusions. For example, consider the case of galactic red shifts. When a star or a galaxy's light is spread out into a spectrum showing all the colours of the rainbow, black lines are

> observed at various wavelengths. The pattern of the lines identified at first were found to be characteristic of the light observed when hydrogen is burned and the light is viewed through prism. The conclusion was drawn that many stars burn marily hydrogen. Continued on Page 6



## **Backyard Animal Challenge**



eople who live in rural regions obviously have an enormous advantage in opportunities to observe and enjoy nature. For a start, they may be able to view the night sky much better than their friends in the city whose view of the stars is dimmed by city lights. Secondly of course there are the animals who make a point of visiting the property. There may be waterfowl in the spring, ducks and geese at least, who come to refresh themselves on your pond. And how about the frogs who deafen the night with their cheerful choruses.

There will certainly be birds and four-footed creatures, large and small. All these observations are a wonderful opportunity to observe who comes to your property, when they come, and what they do while there. Each creature is beautifully designed to live in your region and successfully produce offspring to continue the wildlife presence there. Maybe you can observe some features of each creature which make it successful.





As to city slickers, all is not lost for these people either. Many wild creatures make their way to even the most urban of properties. Squirrels for example cannot fail to attract attention. They are so brash, and so frisky! Some small birds stay all winter. In our area these include delightful chickadees, downy woodpeckers who are convinced that our oak tree is full of bugs, house finches, sparrows, nuthatches, blue jays and the ever-exotic looking magpies. At our property in the city, we regularly see a coyote, and jackrabbits. The highlight of our fall was when two adult moose visited our backyard!

So why not challenge yourself to make lists of your wildlife observations, specifically when and where you see them. Soon you may be inspired to further research. One young lady in grade four, counted sparrows at a bird feeder four times a day, every day in February. She found that the birds came in much higher numbers at the end of the day rather than in the morning. Cold temperatures seemed to have less effect than time of day. Isn't that interesting? You too can find new information when you make regular observations and keep good records. Lastly you can reflect on why all these creatures are so well designed for their lifestyle. Think about Job 12: 7-9 and consider what kind of insights these verses shed on your observations and conclusions.



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## Replacing Darwin: The New Origin of Species



Landmark Work: What's Wrong with 'Survival of the Fittest'

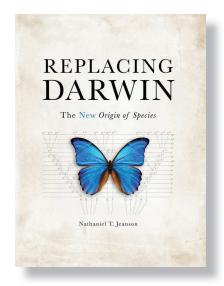
An exciting new book was published in the fall of 2017. The author, Nathaniel Jeanson, is a specialist in molecular biology and bioinformatics with a Ph.D. in cell and developmental biology from Harvard University. With such fancy credentials, one might expect his new book to be very difficult and full of technical mumbo-jumbo! Well, Dr. Jeanson does present some very interesting information, but he does undertake to make the discussion accessible to interested readers. Excellent illustrations (some in

colour) really help. Nevertheless for reading this book a good background in high school biology at least would be a big help.

As the title (Replacing Darwin: The New Origin of Species) indicates, this volume does undertake to evaluate Darwin's theory. Obviously the author finds Darwinism wanting. He declares that the biological information available at the time of Darwin was extremely limited compared to what

we know today. Darwin in his time was entitled to speculate about origins if he wished, but the relevance of his ideas for science today is entirely lacking. Nevertheless when it comes to population genetics, biologists since the early 20<sup>th</sup> century have been asking how their observations can fit into Darwin's idea of evolution. The answer the secular biologists developed was called the new synthesis and it interpreted most observations in terms of random mutations and natural selection.

Of course, arguments against the neo-Darwinian synthesis are not new among those critical of evolution. What Dr. Jeanson provides however is a lot of recent technical data with which to evaluate how well evolutionary



expectations explain nature. He firstly examines the question of common descent versus separate ancestry of created kinds. He discusses hybridizing experiments and other studies which shed light on this issue. In addition, he examines the question of what insights geographical distribution of creatures provides for these questions.

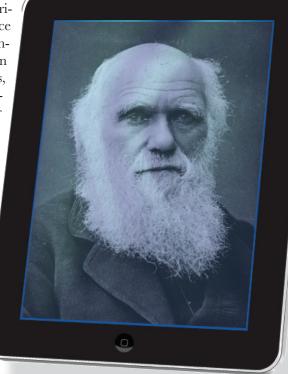
Turning to cell biology, he focuses his attention on the DNA in the cell nucleus compared to a small ring of DNA in the mitochondrion (tiny powerhouses of the cell). Since the short mtDNA lasts much longer after death than the nuclear

DNA, there is a lot more information available in mtDNA from organisms that lived previously. There is an added advantage to DNA from the mitochondrion. In any given population, the only source of differences between generations comes from mutations. Dr. Jeanson then examines mutation rates in mtDNA in many different populations. He compares evolutionary expectations with creation-based expectations. He provides page after page of graphs

along with a discussion of the significance of the data.

This book is a challenging read. However just as you cannot make an omelet without cracking eggs, so you cannot argue that modern science rejects neo-Darwinism without examining some actual data, especially from genetics. This book is a landmark in the study of the origin of animal kinds. The main ideas can be appreciated by all even if the details are more technical. It is beautifully produced. Enjoy!

Nathaniel Jeanson. 2017. Replacing Darwin: the new origin of species. Master Books. 335 pages (hardcover with some full colour illustrations).



# **Elephants**

## The Giant Wonder

by Jerry Bergman <u>Continued from page 1</u> explains how it can achieve these feats (Moody, 2017. p. 217).

The trunk is also used for vocalization, greeting and other social behaviors. Elephants use infrasound, low-frequency calls that allow them to communicate over long distances. Two-thirds of their calls are emitted at a frequency below the range of human hearing, which requires electronic translation for humans to hear what they are saying. Unfortunately, we have tried, but humans have not been very successful in understanding the meaning of most of their vocalizations. Besides sound, they also communicate by touch, sight, smell, and seismic communication over long distances.

#### The Tusks

The specially designed tusks, which serve as weapons and tools for moving objects and digging, are a major distinctive trait of elephants. The tusks are actually extended upper incisor teeth, and are located on both male and female African elephants, whereas only a few Asian males have tusks. About half of Asian females have short tusks known as tushes which lack most of the pulp inside the tusk compared to African Elephants. Elephants normally prefer to use one tusk over the other, known as the master tusk, similar to being left or right handed.

The main enemy of elephants is humans who kill them mostly to obtain their tusks for their valuable ivory. Because poachers have consistently preferred animals with the very best ivory, over decades an increasing number of African elephants are now born without tusks, altering the gene pool so that eventually, in the future, most may lack tusks.

#### The Ears

Another distinctive trait of elephants is its large floppy ears. The el-

"their ears are also used to communicate emotions, including both aggression and joy" ephants' ear flapping helps to control their body temperature, a problem in the hot climates in which many live. The blood flowing through the ears is close to the outside of the body, allowing heat to dissipate as they are flapped back and forth in the air. Like a dog's tail, their ears are also used to communicate emotions, including both aggression and joy, to other elephants.

#### **Its Evolution**

Considering its size and the thickness of it bones, much fossil evidence should exist to document elephant evolution from some smaller ancestor. Furthermore, the fossil evidence is so great that elephants were believed to be successful to the extent that they "dominated most of the large herbivore faunas of the world" in the Pleistocene community (Spinage, 1994, pp. 16-17). The most authoritative reference on elephants is Spinage, who has only a little over one page on elephant evolution but seven pages on the extinction of the many elephant relatives (Spinage, 1994, pp. 17-23).

For these reasons, abundant evidence of their evolution should exist. In spite of extensive searching, no plausible fossil or other evidence exists of their evolution from a smaller ancestor. This is especially problematic because "elephants are unlike any other group of animals alive today," thus its close relatives, if they existed, should stand out from other animals (Redmond, 1993, p. 12).

The claims of elephant evolution are very confusing because, like cats, many extinct—animals are assumed to be related to them. So far, over 185 extinct members and three major families in the order Proboscidea have been documented (Kingdon, 2013, p. 173). The leading paleontologist, Henry F. Osborn (1921), identified some 352-Proboscidean species and subspecies, of which only half are still

recognized as valid today. The now extinct members of the order Proboscidea include mammoths, mastodons, and two lesser known animals, deinotheres and gomphotheres.

The classical evolutionary view of "proboscidean evolution seems to have started with a rather small animal living in the Eocene" called *Moeritherium*, a pig-like animal that was about 2.3 feet in height and weighed close to 518 pounds (235 kg), which is about the size of a modern tapir (Moody, 2013, pp. 220-221).

Arguments against Moeritherium being an elephant precursor include its lack of an elephant-like trunk and its resemblance closer to a sea cow more than to an elephant. Moeritherium also had small incisor teeth shaped more like those of a hippo than an elephant (Redmond, 1993. pp. 8-9). Nonetheless, no better example of an elephant precursor has yet been located. Even the elephant phylogeny tree shows only a series of separate animals placed in a bush arrangement, indicating only vague relationships closer to a family than an evolutionary tree phylogeny (Moody, 1970, p. 221).

The evolutionary assumption is that the trunk and tusks slowly evolved from short, small appendages to the large sizes that these structures exist in today. Consequently, these two traits are critical in selecting potential evolutionary links that end in modern elephants. The problem is, so many other traits of the potential elephant precursors do *not* fit into the evolutionary pattern, even though we have almost 200 possible extinct examples from which to select. The ones chosen are the best fit of those available, but are still, at best, very poor fits.

The latest extinct relative of an elephant is thought to be a *Stegmastodon*, which "would look pretty much like modern elephants if they were alive today," and their "main difference



from elephants is in their molar teeth, reflecting a diet more based on browsing than that of modern elephants."

Thus, this animal appears to be only a minor variation of modern elephants in spite of their very different name. Assuming the existing fossils are representative of the *Stegmastodon* animal, as they date from Pliocene rocks, they indicate that the first elephant was a modern elephant. The problem of determining elephant evolution is also very difficult because:

Understanding how extinct species are related to each other or to their living relatives is often a difficult task. Many extinct species have been identified only from incomplete fragments of some of their bones. However, even if complete skeletons have been found, determining the relationships between species can be tricky because researchers often have to rely solely on the shapes of the bones (Myer, 2017, p. 1).

It was hoped by Darwinists that genetic analysis would help clarify elephant phylogeny, but so far it has

1. https://newscenter.nmsu.edu/Articles/view/12599/nmsu-experts-dig-up-las-cruces-boy-s-million-year-old-fossil-find; http://www.foxnews.com/science/2017/07/18/10-year-old-trips-into-million-year-old-dinosaur-fossil-discovery-in-new-mexico.html. https://phys.org/news/2017-06-genetic-elephant-family-tree.html.

created even more major questions about existing evolutionary trees. The authors of one study that attempted to achieve this task concluded: "Our results demonstrate that the current picture of elephant evolution is in need of substantial revision" (Myer, 2017, p. 1). In short, after looking for almost two centuries, no plausible evidence for elephant evolution exists. The first elephant was an elephant. We cannot even imagine an evolutionary process that would be required to produce all 150,000 muscles in the trunk and the complex nerves and brain to control them!

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### Important Answers to Good Questions

Continued from Page 1

owever astronomers also observed spectra where the pattern of lines typical of hydrogen burning seemed to be shifted over into red wavelengths of light (less energetic).

Naturally astronomers wondered why we were seeing a redshift in the spectral lines. Dr. Byl noted that a number of explanations have been published in the scientific literature. Each explanation has different implications for the nature of the universe. Among the explanations are galaxies moving away from us; galaxies embedded in expanding space; a large mass at the end of the universe; decreasing speed of light; shrinking atoms; and tired light. What this example demonstrates is that for any data set, you can develop various hypotheses. One philosopher of science, Carl Hempel (1905-1997), declared that the transition from data to theory requires constructive imagination! This does not exactly instill confidence in the ability of scientists to explain anything about the universe! Which theory is the right one? Unhappily, science has no valid criterion to distinguish true theories from false ones, so scientists favour theories that best fit their worldview.

Dr. Byl provided us with another amusing example. This time from very recent studies. In 2010 a newly observed exoplanet, Gliese 581g, was said to be so earth-like that alien life was certain to exist on it! Even more recently, it was discovered that the "observation" of

the planet resulted from a data glitch, and the planet most probably does not even exist.

Often very far-reaching conclusions about the nature of our universe are developed by scientists based on very little evidence. Once a theory has achieved favoured status, like the Big Bang, new modifying assumptions are widely adopted to "save the theory at all costs" in the face of conflicting observations. For example, a recent article in European Physical Journal H (https://doi.org/10.1140/epjh/ e2017-80048-5) by Jayant V. Narlikar (2018) lists seven new unsupported assumptions adopted since 1989 to save the Big Bang (p. 23). Thus he summarizes: "[D]espite the popularity of the standard hot big bang cosmology [SBBC] it rests on rather shaky foundations. On the theoretical side there is no well-established physical framework to support the SBBC; nor is there independent observational support for its assumptions like nonbaryonic dark matter, inflation and dark energy." (p. 1)

Naturalism is at heart materialistic, and thus denies such things as purposeful self, an effective mind, and objective rational and moral standards. However, since the defense of any worldview must presume all these, this entails that the defense of naturalism is self-refuting.

Indeed, if there is no purpose to the universe, as naturalists claim, why should we even do science? Even the most atheistic scientist has to assume that the universe is not absurd. Moreover, science relies heavily on mathematics. The physical universe seems to have a deep mathematical structure; physical laws have a large mathematical component. Thus, if these laws are held to be true, this suggests the existence of mathematical truths. But materialism has no place for such an abstract realm.

In short, science needs a viable worldview, which naturalism does not supply. Christians on the other hand, do have a cohesive worldview. We have a reliable standard for truth, the Bible. We understand that God created the world according to a rational plan, and therefore we can expect it to have a mathematical structure. Since we are created in God's image, we can discern the structure. Christianity provides meaning and hope, and a standard by which to evaluate everything.

Previously, on Saturday morning, Dr. Byl's opening address considered "Do we need the Biblical Adam?" Dr. Byl noted that this question is closely related to the essentials of the Christian faith. Mainstream science challenges Christians to re-evaluate this topic in the light of evolutionary conclusions. Quite a number of well-known theologians now agree that man has evolved over millions of years. For example, Dr. Bruce Waltke insists that

Christians need to be credible in the eyes of the world and that our credibility will be reduced to cult status if we deny evolution.

But Dr. Byl insisted that Christians should not be so easily budged from their Biblical position. Citing a number of verses, he declared that the Bible treats Adam as historical. Once you adopt



evolution, he declared, many doctrines change. For example, evolution cannot account for our soul, since material processes cannot produce an immaterial entity. Note Ecclesiastes 12:7 "the spirit returns to God who gave it." Neither the soul nor God fit with

natural processes. Dr. Byl discussed a number of other issues such as the origin of natural evil, which the Bible



declares followed man's fall into sin. If death was already present in the world as a result of the births and deaths of countless generations of creatures, then the fall changed nothing.

Some people may claim that Christians need to support evolution in order to look good in the eyes of the world. The fact is however that for many non-Christians, miracles such as the virgin birth and the resurrection, will never be credible. Dropping Adam undermines Biblical authority and impresses few people anyway.

## **Evolution's Blunders,** Frauds and Forgeries



A sign of the maturity of the creation science field is that books on a broader spectrum of topics have begun to appear. Excellent as titles are on such issues as dinosaurs and radiometric dating, it is nice to see some discussion of new issues. So it is then, that Dr. Jerry Bergman's new

book entitled *Evolution's Blunders, Frauds and Forgeries* is certain to attract attention. Besides, the information contained therein is certainly fascinating.

Many of us have heard of the Piltdown Man fraud and the unmasking of that fraud which rocked the scientific world in 1953. However the story of how the events

unfolded before that is very interesting. Since the deception was so obvious, it is a wonder that the scientific world allowed themselves to be deceived for more than 40 years. Similarly the 1922 'discovery' of Nebraska Man which turned out to be an extinct pig, is also well known. However this book by Jerry Bergman also discusses many other astonishing examples of error or downright fraud.

The case of primitive living material supposedly in process of developing into early cells is quite amusing. Thomas Huxley announced in 1868 that some living "protoplasm" had been discovered in deep sea sediments. Many

big name scientists of the time supported the identification and they kept extending the claims until Huxley in 1871 declared that this protoplasm occurred throughout the North and South Atlantic and Indian Oceans and probably throughout the whole surface of the earth. Eventually it was discovered that a chemical reaction in a sample bottle had caused a jelly-like form of a mineral to appear! It wasn't living at all.

The astonishing thing that this book brings to light is that the list of errors and frauds is so long. Another interesting case involves *Pithecanthropus alatus*, an 'ancestor' of hu-

mans, described by Ernst Haeckel of Germany (famous for his fraudulent embryonic drawings – also discussed in the book). Concerning this human ancestor, Haeckel described many details of its appearance and lifestyle, all of which he imagined. Haeckel considered human descent from apes to be a proven fact, so there was no need to look for actual fossils or any other actual evidence!

The list of topics which Dr. Bergman discusses includes sexual selection, ape to human diagrams of the "great chain of evolutionary progress", appearance of new species in one generation, conflicts over significance of various fossil finds, "primitive tools" made by "prehumans" and so on.

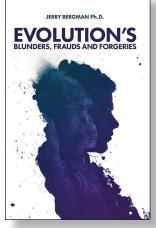
In every case Dr. Bergman demonstrates that a little critical evaluation of the situation would have revealed that

the evolutionary claims made for each artifact were wrong. However it apparently suited the scientists (most of them very prominent names) to promote these evolutionary conclusions. In some cases the impact of illustrations based on fraudulent material continues to have an impact today. Haeckel's drawings of animal and human embryos, all so apparently alike, have for generations convinced people of the reality of evolution. Similarly, the drawings of apes to 'ape-men' to humans is an image indelibly engraved on the minds of millions of people. It is certainly true that an image is worth a thousand words.

sand words.

According to Dr. Bergman, the take-home message is the need to be critical consumers of information. Do not let yourselves be fooled by evolutionary conclusions. A good start in this agenda is to read this book in order to arm yourselves against errors and false claims, some made in former generations, some from the present. Dr. Bergman carried out research on this topic for two decades, so you can be sure that it is well-documented and interesting!

Jerry Bergman. 2017. Evolution's Blunders, Frauds and Forgeries. Creation Book Publishers. pp. 320. Paper. Black and white illustrations.

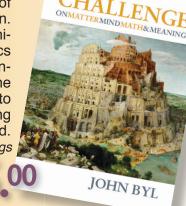




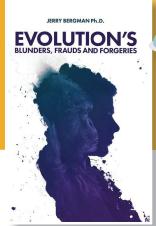
The concepts of mathematics are either eternal truths in the mind of God or ideas manufactured by man. The author examines the philosophical foundations of math and physics from a Biblical perspective contrasted with a secular viewpoint. The divine challenge is to mankind to explain everything without admitting the existence of God.

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# Jerry Bergman Evolution's Blunders, Frauds and Forgeries

Are you looking for an entertaining and interesting book? Look no further! The author spent two decades researching this topic. It so happens that many so-called proofs of evolution in past generations turned out to be completely wrong. Yet these so-called findings were the foundation upon which general acceptance of evolution was based. A skeptical attitude would have avoided a lot of grief for science! This is a lesson for us today.

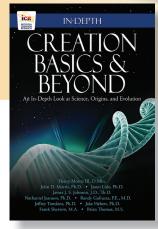
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