

Comparing Creation and Evolution

by Kevin Anderson, Ph. D.

We often hear that the evidence for evolution is “overwhelming,” and that no serious scientist actually questions evolution as a historical and scientific fact. This teaching pervades our society, saturating the media and public education. Few students are exposed to alternative thinking, and most simply accept evolution as fact without question. Even many of our Christian colleges have accepted evolution as a valid scientific concept, and have adjusted both their science and theology classes to accommodate. However, is the evidence for evolution actually “overwhelming?” Do no serious scientists question the validity of evolution? Is this really just a conflict between narrow-minded bible fundamentalists and objective and unbiased scientists who are merely just reporting the evidence?

Evolutionism

The religiously believed philosophy of evolution – the idea that all life on earth arose from an original single cell (which formed by a process of chance and time) – follows directly from humanistic naturalism. This philosophy was perhaps best summarized by the late Carl Sagan when he triumphantly stated that, “The universe is all this is, ever was, or ever will be.” Evolutionary ideas stretch beyond the origin of life and its many variations, declaring that the universe itself originated in an unexplained sudden expansion billions of years ago, and this sudden expansion (i.e., the Big Bang) resulted in galaxies, planets, and eventually in life.

Not coincidentally, this philosophy is paralleled with the fact that almost from the beginning of human history; humans have sought to marginalize God as both creator and ruler of the universe. For many, the writings of Charles Darwin provided them exactly what they were seeking; a supposed “scientific” explanation for life that did not require direct creative acts of God (although Darwin himself allowed for a god that may have formed the initial living systems). As Richard Dawkins stated, “Darwin made it possible to be an intellectually fulfilled atheist” (The Blind Watchmaker, p. 6). This led Dawkins to further conclude that within the universe there is “no design, no purpose, no evil and no good, nothing but pitiless indifference” (*Scientific American*, 273:85).

But, where does this lead us? Where, then, do we get our ideas of right and wrong, good or evil? Where does our very consciousness come from? Ultimately, such concepts have no roots in anything but human opinion and desire. Thus, this is an inevitable moral boundary that evolution is compelled to cross. As such, evolution must inevitably become its own world-view. Its own “religion.”

Realizing this, some evolutionists have attempted to distance themselves from such a position. For example, Eugenie C. Scott, of the National Center for Science Education (NCSE), states that scientists need to do a better job of explaining that science makes no attempt to describe the supernatural and so has no inherent conflict with religion. However, while the NCSE promotes itself as an organization simply seeking correct and quality science educa-

tion, even a cursory reading of their material reveals their entire goal is the promotion of evolution as the one, all encompassing answer to the origins of and reason for life. What is more, as an “official” scientific theory (i.e., what is presented in textbooks and the scientific literature), evolution claims to eliminate the need for a supernatural creator. In so doing it invariably replaces God as ruler and creator of the universe. Therefore, it cannot remove Him from the role of creator yet include Him at the same time. Either God is the creator and ruler of the universe, or He is not. Such a position cannot be neutral, despite Eugenie Scott’s claim, and brings an inevitable conflict with Christianity that cannot simply be dismissed or ignored.

Theistic evolution

Many Christians, including a significant number that are scientists, have come to accept evolution as a correct historical interpretation of life’s history on earth. In so doing, they contend that God merely used evolution as a means of creation. Yet, this “theistic” evolution is not the “theory” that is presented in the textbooks or scientific literature. In fact, I would challenge any scientist to demonstrate that a “theistic” version of evolution has any standing or credibility in the scientific community. What is more, the fact atheists find such “intellectual” comfort in evolution seems to contradict the very claims that “the heavens declare the glory of God” (Ps. 19:1), and that God can be clearly seen in the very nature of the creation (Ro. 1:19-20), leaving man “without excuse” (Ro. 1:20b). Does Evolution declare the glory of God?

In addition, a feature news article by the editors of *Nature* (2005. 434:1053) commented on the issue of faith and evolution. Offering advice reminiscent of Scott’s (see above), they wrote: “Scientists would do better to offer some constructive thoughts of their own. For religious scientists, this may involve taking the time to talk to students about how they personally *reconcile their beliefs* with their research. Secular researchers should talk to others in order to understand how faiths have *come to terms with science*.” (emphasis added.)

“Reconcile their beliefs?” “Come to terms with science?” These are not concepts suggesting one’s faith and scientific views naturally blend. Rather, this statement continues to promote the idea (agenda?) that somehow science and scientific discovery stand opposed (or at least in contrast) to personal faith, let alone biblical teaching.

What about biblical teaching? The description of creation found in Genesis does not readily lend itself to any evolutionary idea. In fact, the writer of Genesis clearly says that the created “kinds” will only reproduce according to their “kind.” Such phrasing does not allow for any form of common descent (see point 1 below). The order of the creation also does not conform to evolutionary sequences (i.e., fruit trees before marine animals, birds and fish at same time, etc.). Was the great flood of Noah a small, local event even though the bible clearly says it covered all the mountains on all the earth (Genesis

7:19)? Did this great flood have no geologic impact? Would it leave millions of years of geologic sedimentation and fossilization virtually untouched, or would it destroy such a geologic record and redeposit its own? Such questions are usually unaddressed by Christians accepting evolution.

Atheists must be “evolutionists” of some fashion. Even those that acknowledge some form of ‘intelligent design’ still do not have to be either Christian or creationist. But, a Christian is confronted with many questions and conflicts between evolutionary “theory” and biblical teaching. The bible challenges everyone to “test all things” (1 Th. 5:21), and in so doing not to be deceived by the vain teachings and philosophies of man (Col. 2:8) or the “opposition of science falsely so called” (1 Tim. 6:20). I challenge every Christian reading this short article to consider the arguments raised for each point below and how the scientific facts presented fit within their view of either creation or evolution.

Sixteen Points

The following points offer a brief overview of certain topics and concepts. Far more could be written on each point, and the reader is encouraged to use the references and sources provided to study more about the topic. Also, while many additional points could be listed, those presented give an excellent starting point for concerned Christians, and will challenge the thinking and assumptions of both scientists and informed laypersons.

1. Evolution and Creation Defined. Typically evolution is defined merely as “change” or “change over time.” This is an all inclusive, vanilla definition. It provides no useful scientific explanation of what evolution actually involves. It provides no criteria for scientific predictions or experimental tests. Also, evolutionists often attempt to use this vague definition to create a false dilemma. Few deny biological changes occur, thus “evolution” can be easily demonstrated. Therefore, if you do not accept evolution, you ignorantly deny all the biological change that can be daily observed and verified.

But, evolution really claims to account for the origin and diversity of all life on earth. In so doing, it maintains that all life has descended from a common origin and thus shares a common ancestry. Therefore, evolution must account for the origin of biological functions, such as flight, vision, and cognition. Evolution (i.e., common descent) cannot be accomplished by just any type of biological change. Only those changes that account for the origin of biological systems and function provide that necessary for evolution. It is examples of these types of changes that are necessary to demonstrate true evolutionary change.

It is also this idea of “common ancestry” that so distinctively separates an evolutionary view of biology with that of a creation view. Creation scientists do not suggest, as some evolutionists mistakenly claim, that life has remained virtually unchanged since the time of creation. Certainly, for example, the ability of leopards and tigers to interbreed il-

lustrates the types of diversity that have occurred within the original created "kind." Another example is the wide diversity of dog breeds that have originated from the same created "kind." But, within such change or variation is very distinct limits.

When evolution is clearly defined as "common descent" and creation is defined as limited change after the initial creation, then a clear distinction becomes apparent. Evolution describes life as having begun at an initial level of low sophistication and complexity, which progressively increased over time. Creation presents an opposite position, where life was originally created at a level of high sophistication and complexity and all subsequent changes have reduced or lowered this initial state of sophistication. Much of what evolutionists present as "evidence" has virtually nothing to do with common descent (see some examples in points below). In fact, frequently they promote examples that actually involve changes which are the opposite of what is necessary for common descent (ex. see points 4, 5, 13, 14). When both views are clearly defined, the evidence can be more properly understood, and the flaws of the evolutionists' arguments become more apparent.

2. Fossil Record. The fossil record is a record of creatures that have died. Relationships between fossils are determined in one of two ways. Either they are based on the idea that the fossils are so close to being alike that we believe they are the same sort of plant or animal, or they are based on preexisting ideas about the relationships, which, in turn, also pre-determines the conclusions. We often read about a particular "transitional" (in-between) form bridging the gap between one kind of organism and another. It is important to remember that the transitional forms that have been found are only transitional because they are declared to be so. We have no evidence that they are not simply another "kind" of plant or animal.

For instance, if someone who had never seen a bat were to look at a fossilized bat, they might easily declare that this was a transitional form between birds and mammals! But we know that bats are contemporary and highly specialized creatures, and are not transitional forms of any kind. This applies to fossils as well. We make numerous assumptions anytime we see a fossil and then declare it to be, for example, "transitional" between birds and dinosaurs, or between fish and amphibians.

The reality is that a "transitional" form, like beauty, is in the eye of the beholder. People tend to see what they want to see, and the theory of evolution, after all, demands transitional forms. Thus, some discoveries are declared "transitional" and heralded loudly in the press. When a fossil's "transitional" status is retracted, however, it is often done very quietly, with little or no press coverage. An excellent example of this is "Lucy," which was heralded so loudly during the 1970's and 1980's as a key transition of human evolution and undeniable proof that humans had "evolved." During the 1990's, though, many evolutionists, including one of her discoverers, quietly began removing "Lucy" from the human evolutionary tree (See: *Science*, 1996, 272:654 and *National Geographic*, 1996, March, p. 96). Thus, all the hyperbole gives the impression that many transitional forms have been found. The truth is far different. (See: http://palaeo-electronica.org/2002_1/EDITOR/icon.htm.)

In fact, the fossil record reveals distinct kinds of plants and animals with no evolutionary connection to each other. As Denton observed, "... while

the rocks have continually yielded new and exciting and even bizarre forms of life ... what they have never yielded is any type of Darwin's myriads of transitional forms ... their absence remains one of the most striking characteristics of the fossil record" (*Evolution: A Theory in Crisis*. 1986, p. 162). Little has changed since Denton wrote this, and alleged "transitional forms" continue to come and go, but the nature of the fossil record still remains a record of distinct groupings of organisms.

There have been a number of theories proposed to explain the gaps while still holding to evolution. For example, "punctuated equilibrium" is the idea that evolutionary changes happened very quickly in small, isolated populations, leaving no fossil record. The fossil record itself, however, is very much in accord with what we read in the Bible: plants and animals were created, and reproduce only according to "kinds."

3. Simple vs. Complex. Evolutionists must declare that the earliest life forms were quite simple, and that time and some "mysterious" evolutionary process has led to the complexity and variety of living things we see on the Earth today. However, the concept of "simple to complex" is, itself, a misleading simplicity. The "simplest" of all cells possesses a bewildering intricacy and sophistication. In this single cell, thousands of proteins interact in specific and orderly ways in a protected environment. Nutrients are taken in, broken down, used, and waste expelled. Even bacterial cells exist in a complex community where they react to their environment, communicate with each other, and replicate in a chain of events we still don't completely understand. There is nothing simple about any cell. There was nothing simple about any cell at *any* time. And, yet, a cell is the "simplest" form of life we can find! So the idea of "simple to complex" fails to acknowledge that even the "simple" is still more elaborate and sophisticated than any feats of human engineering.

Evolutionists sometimes try to reason in the opposite direction, speaking of the "complexity" of a snowflake or a tornado in an attempt to show that natural processes can produce "complexity." Biologically speaking, however, there is a huge difference between the complexity of a cellular system and the complexity of a snowflake or a tornado. This is an area of potential confusion that evolutionists have found they can readily exploit if they use enough fancy-sounding words and "pretend" that the same natural process that formed a snowflake could form a cell. Neither snowflakes nor tornados can take up specific nutrients, break them down to use for energy, replicate themselves, communicate with other snowflakes or tornados, or form the complex biological communities that cells do. Snowflakes are beautiful, tornados are powerful, but they are not living and they do not even begin to approach the intricate complexity of cells.

4. Four Basics. The theory of evolution depends on four things being true: enormous amounts of time, fortuitous chances, specific types of mutations, and natural selection. None of these four events supports evolution (i.e. common descent) at all.

Time results in things breaking down. Decay is a natural process of time, and time alone has never been shown to have any other affect. Time certainly has no capacity to organize or integrate material in a functional manner. If you leave a bicycle out in the weather, it rusts and falls apart - it does not become an automobile.

Chance is an argument proven wrong time and again. There is no valid reason to suggest that a

blind, natural process (i.e., chance) could ever produce something as complex as the "simple" cell. In his book *Evolution: A Theory in Crisis*, molecular biologist Michael Denton asked whether it was "really credible that random processes could have constructed a reality [that] ... is complex beyond our own creative capacities, a reality that is the very antithesis of chance, which excels in every sense anything produced by the intelligence of man?" (p. 342).

Mutations, or changes in the genetic content of organisms, especially with respect to the higher order of animals, are almost always detrimental, and often lethal. While some mutations (especially in the plant and microbial world) may prove "beneficial" under certain conditions, changing those conditions usually renders the "benefit" almost useless. In fact, populations of organisms often oscillate between change - a wonderful testimony to the adaptive design within all living things. In general, mutations are either neutral (i.e., no change in cellular activity) or they reduce or eliminate a pre-existing cellular activity, such as loss of transport systems, regulatory systems, enzyme specificity, etc.

However, this is the opposite of what is required by evolution (specifically "common descent"). Rather, to account for all the diversity of life, evolution requires mutations that account for the origin of these specific cellular activities. Despite hundreds of examples of mutations in a wide variety of species, there is no unambiguous example of a mutation that fulfills this requirement. And, if such an exception were found, it would be just that - a rare exception. This is not a reasonable basis for an entire theory of biological development and diversity.

Natural Selection fits very nicely within a creation model. Darwin assumed that this "selection" process would drive a "building" process in organisms, whereby organisms that did not possess the ability to walk would be pressured into developing such an ability, or organisms that did not possess the ability to fly would be pressured into developing flight. As such, natural selection was given a capability it never did possess - the ability to generate or create something. All natural selection can do is select among the features that are already present in the biological world. It acts as a weeding-out system, not a development system. If enough genetic "information" is eliminated from the gene pool, a new trait or feature may emerge (e.g., dog breeds), but this is only if such features and traits were initially within the gene pool. These concepts were first stated by William Blyth, a creationist, not Charles Darwin. (See: www.icr.org/pubs/imp/imp-283.htm.)

5. Variation is Not Evolution. Evolutionists have attempted to prove their case by mixing two different processes under the term of "evolution." The first is variation. We see variation everyday. Puppies and kittens are all born with individual differences in their size, coloring, and personalities. In fact, we know that sometimes these differences can be huge. Would someone looking only at the fossil record think that both Chihuahuas and Great Danes were the same species or that they lived at the same time? Perhaps not. But they are. We can see some remarkable variations within certain kinds of organisms, but we still recognize them as dogs, horses, cats - or people. We know Pygmies and Zulus and Germans and Chinese are all human beings - just different varieties.

Because the word "evolution" is often defined simply as "change" or "change over time," evolutionists point to these variations within kinds as

the sort of changes which, when accumulated and selected by “nature,” have resulted in the common evolutionary descent of all life. But, such evolutionary descent (e.g., the supposed evolution of fish to human) requires much more than simply “variation.” It requires massive changes in body-type, biochemistry, and behaviors.

It is a false argument to point to the small variations we see on a daily basis, and then claim that this proves that a one-celled organism evolved into ferns, people, elephants, butterflies, and oak trees. In fact, as mentioned under point 1, only specific types of changes are required to accomplish the claims of evolutionists. Expression of genes already present, or mutations that eliminate functions already present are not the types of changes required by evolution. Yet, such changes are constantly offered by evolutionists as examples of how evolution proceeds.

6. Carbon-14 Indicates Fossils are Young. Carbon-14 (C-14) is a radioactive atom formed in the upper atmosphere. C-14 atoms join oxygen atoms to make radioactive carbon dioxide, which plants assimilate to make part of their tissue. When humans and animals eat these C-14 containing plants, they ingest small levels of C-14, which accumulates in their bodies. Following death, the C-14 in the body will decay at a half-life of 5,700 years (i.e., through radioactive decay, 50% of the C-14 will decay every 5,700 years). Thus, after some 250,000 years, every atom of C-14 would be gone from a fossil.

Recently, several creation scientists found that detectable level of C-14 were present in fossils from most major geologic strata (including those claimed to be over hundreds of million of years old (Baumgardner, et al., 2003. *Proceedings of the Fifth International Conference on Creationism*, pp. 127-142). Similar results were found with samples of coal. If the assigned age of these samples is correct, it is physically impossible for them to contain any detectable level of C-14 - giving a strong indication that they are all less than 70,000 years old (by the uniformitarian way of estimating C-14 age). What is more, all samples contained approximately equal amounts of C-14, suggesting they are all approximately the same age. Some evolutionists have attempted to counter these findings by suggesting the detected levels of C-14 are from contamination. However, contamination does not really account for such uniform levels of C-14 in all of these fossil and coal samples. What is more, similar levels of C-14 were also found in twelve diamonds, five of which were from deep mines. Such C-14 levels in diamonds (the most impenetrable material known) could not be the result of contamination, and indicates they are younger than 50,000 years. Hence, analysis of these various samples gives strong physical evidence of their recent origin (see also http://www.icr.org/research/AGUC-14_Poster_Baumgardner.pdf).

7. Massive Fossil Graveyard Indicates Extensive Flood. Billions of large nautiloids (an ancient marine cephalopod related to modern squids) are packed in a Redwall Limestone layer that extends from the north rim of Grand Canyon. This fossil bed is some 7 feet thick and covers approximately 17,000 square miles. The fossilized remains are laid in a preferred direction, which indicates that they were not only buried rapidly but that they were transported from the same direction in a single catastrophic event. In addition, as many as 25% of the fossils are buried in an up-right position, which further indicates their rapid burial. The existence of such large numbers of fossils in a single, thin layer is strong evidence that they were transported and buried by a

single, large flood. What is more, similar nautiloid fossil beds have been found in other regions of the world. All these beds indicate burial by a large body of rapidly moving water, i.e., a huge flood. Such a flood is described in the book of Genesis. (See Austin, 2003. *Proceedings of the Fifth International Conference on Creationism*, p. 55-99.)

8. Dinosaur Remains Not So Old? A dinosaur skeleton from Hell Creek Formation (Montana) may still contain intact tissue, including blood vessels (Science. 2005. 307:1952). While the skeleton is assumed to be some 68 million years old, the vessels are still flexible and elastic, and some areas of the bone do not even show any evidence of secondary mineralization (i.e., they are still totally bone, not fossil). However, no evidence has ever been offered that soft tissue (including blood vessels) can survive in sedimentary rock for even a few thousand years, let alone tens of millions of years (*Nature*. 1993, 362:709). In addition, dinosaur eggs claimed to be 70 millions years old still possessed a putrid smell, and contained enough intact tissue to enable immunological testing (*Natural History*. 2005. May, p. 11). Yet, evolutionists simply look at these discoveries as a mere oddity without even questioning whether such tissue could possibly survive the alleged millions of years. This is clearly an example of where the paradigm (evolutionary geologic ages) supersedes the evidence (soft tissue does not survive millions of years in sedimentary rock).

9. Aftermath of Mt. Saint Helens' Eruptions. Following the eruptions of Washington's Mt. St. Helens volcano in 1980, a series of geologic events occurred that have proven very informative for creationists as to how rapid and dramatic geologic events can occur. For example, in March of 1982, a 20 mile long mudflow from the mountain cut through rock and created a 140 foot deep canyon. This canyon, formed in a little over one day, is referred to as “The Little Grand Canyon” since it shares several geological features with Grand Canyon (Arizona). These features include exposure of stratified rock layers along the canyon sides, flat areas in the highland surfaces of both canyon sides, and gully headed side canyons. A small river also now runs along the bottom of this canyon, but the river did not form the canyon, the canyon formed the river. The formation of this canyon challenges the assumption that such geologic processes take thousands and even millions of years.

In addition, massive numbers of trees were ripped from their roots and swept from the side of the mountain by the initial eruption. Over a million of these trees were subsequently deposited into nearby Spirit Lake, forming a huge floating log mat that covered much of the lake. The lake also was filled with ash and other debris from the eruptions. One by one these logs became waterlogged and sank to the bottom of the lake (many in an upright position due to the heavier specific density of the lower end of the trunk). As the debris also settles, it is covering the sunken logs, giving the appearance they had been buried in place, rather than transported and buried.

Specimen Ridge, a 1,200 foot ridge at Yellowstone National Park, contains some of that park's famous petrified forests. A road side marker originally identified this ridge as the site of 27 different forestations and subsequent burials (a process that would have taken over 40,000 years). However, this ridge exhibits similar characteristics as that found at the bottom of Spirit Lake. Confronted with the events occurring at Mt. St. Helens, the road side marker has been removed, and a second marker changed to

suggest that some of the petrified forests in the park resulted from rapid transport and burial of the logs.

In addition, few of the logs transported to Spirit Lake retained any bark, branches, or leaves. Instead, the trees were apparently denuded by the volcanic blast, and the surviving material (esp. the bark) was transported separately onto Spirit Lake. As it has settled to the bottom of the lake, it has formed a three feet thick layer of peat. This peat greatly resembles a likely precursor of the type of coal beds commonly found in Pennsylvania. Any subsequent eruption of the mountain may bury this material under tons of lava and ash, providing an ideal condition for rapid coal formation.

(For additional information, see Austin. 1984. *Origins*. 11:90; Austin. 1986. *Proceedings of the First International Conference on Creationism*. p. 3-9; Coffin. 1983. *Origins*. 10:9; Coffin. 1983. *Geology*. 11:298; Morris and Austin. 2003. *Footprints in the Ash*.)

10. The Dating Game. In 1972, Richard Leakey discovered a hominid fossil in a region in northern Kenya designated as the KBS Tuff. This fossil specimen has since become known simply by its museum designation, KNM-ER 1470 (a.k.a. skull 1470). Leakey assigned a date for 1470 of 2.9 million years. However, the anatomical features of the skull were far too advanced for an acceptable human evolution time frame. Thus, the date of 2.9 million years was immediately challenged. Interestingly, the age Leakey assigned to the fossil was based upon the 2.6 million year old age previously assigned to the KBS Tuff. This age was claimed to have been derived from several methods, including potassium-argon (K-Ar).

But, a study of the real process used to date this tuff begins to reveal much of the assumptions and guess-work involved in geologic dating – not the objective, analytical process we are led to believe is the way geologic ages are assigned. Originally, K-Ar testing gave an age of over 200 million years for the KBS site. But, since fossils of various mammals, including Australopithecus and other hominids had been found in the site, it was surmised that a date of 200 million years could not possibly be correct (*Nature*. 1970. 226:226 – note that fossils were used to determine if radiometric methods provided an acceptable date). Finally, applying several radiometric methods, and letting fossils serve as a guide, a date of 2.6 million years for the Tuff was established (*Nature*. 1970. 226:226; 1972. 239:379; 1974. 247:344). The use of so many so-called ‘objective’ methods led Leakey to conclude the age for the site was “securely dated” (*Nature*. 1973. 242:447).

However, challenges to the assigned age of skull 1470 led many evolutionists to question the accuracy of the dates assigned to the KBS Tuff. What was previously considered a well established date was subsequently discarded as erroneous and incorrectly preformed. In fact, a wide range of K-Ar dates were obtained for samples from the KBS tuff, and those giving ages older or younger than what was ultimately published were discarded as contaminated (although no real means of determining contamination was offered) (see Coppens et al. 1976. *Earliest Man and the Environments in the Lake Rudolf Basin*). A fission-track dating of zircon from samples of the tuff continued to give the older date of 2.6 million years (*Nature*. 1976. 263:738)

The controversy continued for several years until Leakey finally announced a consensus date of 1.9 million for the tuff and 2 million years for skull 1470 (Leakey. 1984. *One Life*). So, dates that were

originally accepted as secure and valid were then rejected on the basis that samples were contaminated, improperly collected, etc. In reality, the challenge to the original 2.6 million year date was because it gave an age for skull 1470 that conflicted with most evolutionists' view of human evolution, not because a flaw in the methodology or sample collection was suddenly determined. The dating of skull 1470 raises serious issues with both the validity and trustworthiness of geological and paleontological dating methods.

11. The Laetoli Footprints. In 1979 a series of footprints were found in layers of volcanic ash in northern Tanzania, Africa. Some of these footprints had a very distinct human appearance, possessing the characteristics of a modern human foot and a modern human style of walking (Leakey. 1979. *National Geographic*. 155:446; Robbins. 1987. *Laetoli: A Pliocene Site in Northern Tanzania*; Tuttle. 1981. *Philosophical Transactions of the Royal Society of London*, B. 292:89). In fact, Tuttle concludes that the footprints "are indistinguishable from those of modern humans" (*Human Evolution: Past, Present, and Future*. 1985 p. 130). However the ash layer was dated by the potassium-argon method as 3.6 – 3.8 million years of age.

Not questioning the validity of this assigned age, evolutionists have subsequently worked to identify the creature responsible for the prints. Some suggest it was a species of *Australopithecus*, thereby demonstrating that these creatures had already evolved a modern style of walking. But, *Australopithecus* have never been shown to possess feet capable of making all the features so evident in the footprints. Others have suggested the prints were made by an unidentified group of hominids, which avoids the nasty difficulty of trying to correlate the anatomy of a fossil "ape-man" with the obvious "modern" anatomy of the footprints. Tuttle further commented that if the "footprints were not known to be so old, we would readily conclude that they were made by a member of our genus *Homo*..." (Tuttle. 1990. *Natural History*. March, p. 61-64).

There appears to be a contradiction here. The maker of these footprints is far too anatomically advanced to fit the evolutionary time frame of human evolution. So which is more conclusive, the assigned date (see point 10), or the clearly advanced anatomy represented by the footprints?

12. Evolutionary Development (Evo Devo). All cells in the body contain the same set of chromosomes. But, different body cells use different genes on these chromosomes. The difference between a muscle cell and a brain cell is due to the genetic "switch" that determines when specific groups of genes are "turned on" during embryo development. This is also how embryonic cells know where to put the ears, eyes, and fingers. Such switching of genes "on" and "off" is key to proper development of the embryo, and birth defects (such as missing fingers or toes) often result from errors in the timing and specificity of these genetic switches.

Research with fruit flies has demonstrated that changing these genetic switches can cause such deformities as additional wings or eyes (which are functionless), placement of legs on the head, or the complete absence of wings or eyes. Since these alterations result in large scale developmental changes, many evolutionists point to these genetic switches as

key mechanisms for evolutionary development (i.e. *Evo Devo*). A feature article in *U.S. News & World Report* (March 28, 2005), presented the idea that at least *Evo Devo* provides a genetic mechanism for evolution (although common descent is not mentioned).

Also not mentioned in this article is that *Evo Devo* requires the genetic template of genes and control systems to already be in place. It offers no explanation for the origin of these elaborate and complex genetic systems - an essential requirement for evolutionary theory (see point 1). Instead it demonstrates that alterations of such systems will readily cause morphological deformities, such as eyeless fruit flies - truly an evolutionary wonder.

The more benign of these developmental changes, such as pigmentation intensity or location, fit well with a creation model and offer an example of how extensive varieties can be introduced into the created kinds (see point 1 & 5). But, these level of changes do not provide a sufficient means of accomplishing common descent. In fact, *Evo Devo* is unable to give legs to a fish, wings or feathers to a reptile, or an opposable thumb to a dog. *Evo Devo* is limited to the genetic potential already present in the specific organism, and merely demonstrates that altering the precise synchronization of these genetic switches can lead to a wide variety of deformities. This is totally consistent with a creation model, but fails to fulfill the grandiose claims of evolutionists.

(For further information see May, et. al. 2004. *Creation Research Society Quarterly*. 41:185)

13. Antibiotic Resistance. Mutations can give bacteria a resistance to certain types of antibiotics. As such, evolutionists have frequently pointed to this phenomenon as a means of "seeing evolution in a Petri dish." However, analyses of the mutations that produce this resistance suggest a much different conclusion. Instead, these mutations reduce or eliminate the binding affinity, regulatory function, or transport capacity of certain proteins. While these mutations provide the bacterium a resistance to certain antibiotics, they do so at the expense of these cellular functions.

Such mutations clearly provide variation within the bacterial population and, as such, fit nicely within a creation model. However, evolution claims to be an explanation for the *origin* of biological functions and diversity. Mutations that reduce or eliminate cellular functions cannot be offered as examples of how those functions "evolved" in the first place. In fact, (as discussed under 1 & 5) such mutations are the exact opposite of those required by evolution. (For further information see Anderson. 2005. *Creation Research Society Quarterly*, 41:318).

14. Peppered Moths. In 1848, apparently 98% of peppered moths in Britain were gray, the rest being black. When the Industrial Revolution put large amounts of soot on the trees, the light color became a liability to moths that lived on tree trunks. It was suggested that these moths were easily seen by birds, making them more likely to be eaten than the dark moths. Within 50 years, the population of gray moths significantly decreased. However, the enforcement of various air pollution laws dramatically reduced the soot pollution, and gray moths once again predominated. This, however, is merely variation within species - a nice example of change in gene frequency, but a change that has nothing to

do with evolution's primary concept of common descent (see point 1). No new organism, nor any new characteristic came into existence. There were gray and black varieties in 1848, and there are gray and black varieties today.

More recently, the original study data have been challenged. First, the moths do not generally reside on tree trunks, so they would not have been such easy prey for birds. Second, the moths on tree trunks, often pictured in textbooks, were artificially placed there for photographing. (See: Hooper, 2002. *Of Moths and Men: An Evolutionary Tale*.)

15. Complex Relationships. When we look at nature, from any vantage point in our world, we see truly complex relationships among various living things. For example, plants require insects for fertilization, animal populations are kept in check by a predator/prey relationship, and ants "farm" and "milk" aphids, which live on plants. Some life forms are parasitic of others, and some depend on others for their existence even though they are not parasites. Evolution declares that each of these complex relationships developed "accidentally" through time, although they have little basis for explanations of how. Yet, for evolution to make its continual and oft repeated claim of being the unifying "theory" of biology, it must account for such relationships. On the other hand, such complex "inter-species" relationships can be readily understood within a creation framework.

16. Genesis is Ancient Hebrew Narrative. Many people (including some bible scholars and theologians) maintain that the first chapter (several chapters?) of Genesis is merely poetic metaphor, and should not be considered a historical narrative. However, in a very detailed analysis of the word structure and usage of Genesis (1:1 – 2:3), Dr. Steven Boyd compared narrative and poetic passages from the bible and found that there was a statistically significant difference in the wording and grammatical style of poetic and narrative bible passages. Using this statistical analysis, Dr. Boyd found that Genesis 1:1 – 2:3 cannot be identified as poetry. In fact, his analysis very clearly showed the Genesis text to be no less of a historical narrative than any other historical text in the bible. Therefore, since it is clear the writer of Genesis intended Genesis 1:1 – 2:3 to be taken as historical narrative, it cannot be any more readily dismissed than any other narrative passages (including the resurrection of Christ). In addition, biblical narratives were intended to be read as a description of a true historical event, yet contain a distinct theological message. Thus, when Genesis 1:1 – 2:3 is read as the narrative it was intended, there is only one tenable understanding of the text: God created everything in six literal days.

(For additional information of Dr. Boyd's work, see Impact #377, ICR. In addition, detailed discussion of Dr. Boyd's work will be presented in the RATE books scheduled to be published jointly by CRS and ICR in late 2005).

Kevin Anderson, Ph. D. is the director of the Van Andel Creation Research Center of the Creation Research Society, (Chino Valley, AZ.), and the editor of the *Creation Research Society Quarterly*.