
Creation Answers

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Who does this newsletter?

This newsletter is produced by Wayne Spencer of Creation Education Materials on a Quarterly basis. Its purpose is to bring creationary research within the reach of Christian families and provide up-to-date reliable information on the creation issue. Wayne Spencer is a creation researcher and former teacher who has presented papers at the International Conference on Creationism and contributed to radio programs for the Institute for Creation Research.

This newsletter is meant to help people plug into creation resources and get informed about creation and evolution. It is provided free of charge on request. It is provided as an Adobe Acrobat file, a Microsoft Word 97 document, or a plain text e-mail. The Adobe Acrobat Reader, available for download on the internet, is the best way to view the newsletter. There are no restrictions in copying this newsletter or passing it on to others. To request to be placed on the e-mail list, send a request to Wayne at w.spencer@attglobal.net.

More information on Wayne Spencer's education and publications can be found on the **DFW Creation Net** web site. You'll also find a variety of articles, teaching aids, and how to contact creation organizations. <http://pws.prserv.net/creation/creation.htm>

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A Personal Note from Wayne Spencer

Hello, and thank you to those who have recently asked to receive this newsletter. In this issue I've decided to increase the length from 4 to 6 pages to have space for more information. Juno e-mail users will probably find it longer than this when printed.

Recently I completed work on a technical paper called "The Existence and Origin of Extrasolar Planets" for the Creation Ex Nihilo Technical Journal, published by Answers in Genesis. The paper should appear in the journal early in 2001. There is also a letter to the editor in the current issue of the same Technical Journal written jointly by Dr. Danny Faulkner and myself. Danny Faulkner is a physics and astronomy professor and a young age creationist. The letter is about how to explain craters in the solar system from a young age point of view.

Another very interesting project has surfaced recently. There is a man named Jim Brenneman who is heading a project to produce a multi-million dollar fictional movie about Noah's Flood. There have been other movies produced on the Flood story, but to-date they all seem to seriously distort the story in some way. Brenneman is assembling a group of leading creationists and Bible scholars to serve as advisors on the content of the movie. I have tentatively agreed to be on this content team. I'm convinced the project is being approached seriously and the goal is to produce a high quality film that is accurate Biblically and scientifically. This would be the first project of this kind in which knowledgeable creationists have had significant input on

the content of the film. I would appreciate prayer as I participate in this project.

Wayne Spencer
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Introduction to Creation Biology, Part 2

Wayne Spencer

In Part 1 of this series, the Biblical term “kind” was explained, as well as the terms microevolution and macroevolution. Macroevolution represents the large scale changes required for evolution, such as from fish to amphibian, for instance. Part 2 will address how living things change to adapt to their environment. Macroevolution requires large inputs of information into the genetic makeup of living things, to make organisms change from one form to another. In macroevolution, without a Creator’s input, there is no explanation for where all this information can come from to make the complex changes required by evolution. In the creationist view, the Creator made living things able to change, but only within limits.

Mutations

DNA is the special complicated molecule that contains all the information that determines what the body of a living thing is like. Every cell in our bodies contains this informational molecule. Chemical sequences in the DNA are copied in reproduction, with half of the information coming from the father and half from the mother. If something is not copied correctly in some way it is called a mutation. Mutations are a bad thing as a rule, though some mutations have little or no effect. There are mechanisms in cells that tend to correct mutations or prevent them from affecting us. Mutations cause many genetic diseases. But, evolutionary biologists argue that mutations would sometimes produce changes beneficial to a living thing, something

that gives it an advantage of some kind and helps it survive.

There are several problems with mutations producing the changes required by macroevolution. First, mutations are almost all harmful and mutations are so rare that even if there are “beneficial” mutations, they could never become common in the population. They wouldn’t last. I do not make this statement lightly, the problem of mutation rates is a major issue and an issue that requires some significant technical discussion to fully appreciate. The problem with mutations and how often they occur is a mathematical problem that many biologists do not appreciate adequately. Recent research implies that there are something from 1 to 3 mutations in humans per generation, on the average (harmful or not). This is enough to create problems for evolution theories. It creates a problem for macroevolution because if mutations were this frequent, the harmful ones would cause too many negative effects. On the other hand, if mutations occur less frequently, evolution still has a problem because then the beneficial mutations cannot become common in the population, so the beneficial changes in living things cannot get going.

I would like to make a distinction between what I would call soft beneficial mutations and hard beneficial mutations. (This is my terminology only, I am not aware of any other writer who makes this distinction.) Soft beneficial mutations only involve some modification of a trait the living thing already has (usually the loss of some function), they don’t make anything really new. Put another way, soft beneficial mutations do not add significant amounts of new information to the genetic code. Soft beneficial mutations may still be harmful in most circumstances but in certain special situations it may provide an advantage.

Sickle cell anemia is an example. Sickle cell anemia is a genetic disease that you would not wish on anyone. But, for people in certain tropical areas of the world

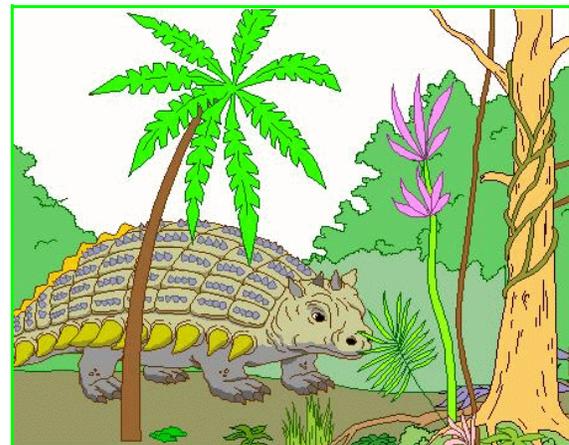
where malaria is a problem, sickle cell anemia gives resistance to malaria. So, sickle cell anemia could be described as a beneficial mutation (in the “soft” sense). But, it could never be important for macroevolution because it is only an advantage in special circumstances. Malaria is not a problem everywhere in the world and so sickle cell anemia will never make the whole human race evolve resistance to malaria. “Soft” beneficial mutations are consistent with Biblical and scientific creationism in my opinion.

“Hard” beneficial mutations, on the other hand, are what macroevolution requires. Hard beneficial mutations have to produce a trait or organ system that is really new, not just a minor modification of what it already has. This requires addition of complex information in the DNA of an evolving animal or plant. And, it must be the type of change that would be an advantage to that living thing wherever it lives. It would have to be something that would benefit all of that living thing, so that the change can become common in the population. Soft beneficial mutations can happen, hard beneficial mutations cannot.

Modern molecular biology has shown us that there are great complexities in how information is encoded in the DNA. There is much scientists do not yet know. Scientists may determine the genetic function of particular sequences of genes in humans. But the same sequence may have a different function in another living thing, or it may have multiple possible functions that depend on other genes in some way. A change in one particular gene can also affect more than one trait. So, the information encoded in the genes of living things is complex. But, mutations are totally random, one mutation has no affect on the next mutation and they have nothing to do with the needs of the organism. Macroevolution requires changes that often affect multiple organ systems at once, and if these changes do not work together properly the organism may not survive.

For instance, in the evolutionary change from reptiles to birds, changes in the skeleton would require changes in the muscles as well as in the respiratory system. Changes in the muscles requires changes in the nerves, and so on. Living things are wonders of divine engineering. They are organized in complex ways. Yet, random mutations are said to provide the raw material that make the changes of macroevolution possible. I would say mutations are simply not the right kind of phenomena to generate the complex specified information that makes living things what they are. In fact, mutations are not necessary for living things to change to adapt to their environment.

Many different animals have adapted white coats of fur so they can live effectively in arctic regions where there is lots of snow. These animals were not created so well adapted to arctic conditions at Creation. Rather, the Creator made them with enough information in their genes to allow for that possibility. Thus they became that way over a number of generations. This again is microevolution, not macroevolution.



Do you know what kind of dinosaur this is? See the last page for the answer.

Natural Selection

Macroevolution depends on the idea that the environment can cause the bodies of living things to change to any degree,

given enough time. The changes take place over many generations. Natural selection is a process in which individual organisms (animals or plants, for instance) that have some advantage over their fellows will have more offspring and in time those with the advantage will be the most numerous in the population.

The classic example of this for years has been the “peppered moths” in England in the years of the industrial revolution. These moths come in two varieties, one light and one dark in color. As the story goes, when soot and pollution from the factories made the trees dark, the light colored moths were easily seen by birds, so the birds ate them and what was left was mostly dark moths. So, many textbooks have pointed this out as an example of how natural selection changes a population. Well, this was believed to be a valid example and was not questioned by creationists to my knowledge, but now evidence has come to light that shows the whole story of the peppered moths to be wrong. A now famous picture that shows a light moth and a dark moth on a tree has appeared in many biology and life science textbooks (including in creation-based Christian textbooks). Recent research from evolutionists has shown that Kettlewell, who published this study on the moths years ago, actually faked this picture. These moths actually do not rest on trees and the moths in the famous picture were dead moths glued to the tree! So, this makes the peppered moth story no longer a valid example though it sounds quite plausible. Even if it were a valid example of natural selection, it would only represent microevolution (or minor changes), not macroevolution.

On the other hand, there are valid examples of natural selection. There is a degree of competition between animals for food, water, for mates, territory, etc. There are winners and losers in the animal world. Natural selection is really just a SELECTION mechanism. It does not create anything new, but only determines who wins in the sense of which animals survive best and have more

offspring. Creationists acknowledge that natural selection occurs. This allows living things to adapt to some degree and survive when their environment changes. Natural selection is supposed to work with mutations to make the changes of macroevolution possible. According to evolutionary theory, new traits develop as the climate or food supply changes, or as predators change, or as organisms move into a new habitat.

For instance, changes in climate or vegetation could force some animals to move to another area for food or shelter. Over a period of time, having to live in a different area could cause a group of animals to change in their color, the shape of their teeth, or their fur for instance.

According to evolutionary theory, beneficial mutations are believed to somehow add up in the genetic code until they make some significant improvement possible in the body of an animal. This improvement will give them some new ability. This new ability would give that particular animal an advantage over its peers, but the new ability would never spread to most of the others (of all groups of that type of animal) without natural selection.

By natural selection the animal with this new ability might live longer and have more young. Then its offspring would also have the ability and they would also have more young than others that did not have this new ability. In time, the individuals with the “new ability” would become the norm, and the “new ability” would no longer be new. The individuals who did not have the ability would become fewer and fewer. Evolutionists believe that this process works best in small populations, because a new trait can become the dominant thing in the group easier. But, research has shown that small populations, rather than leading the way in evolution, are more likely to go extinct than larger groups. Charles Darwin’s book “The Origin of Species,” published in 1859, contains much about natural

selection. So, natural selection is a theory about what happens to groups of living things when they are in competition.

We can see natural selection among living things, but living things do not always compete. Living things also cooperate to a surprising degree. They may live and let live if they can. Often they compete only at the points where they have to. The idea that the strong survive but the weak die, based on natural selection, is an oversimplification. There are many examples in nature where instead of the weak dying they end up in some symbiotic relationship with another creature. It's like they "make a deal" with some other living thing that benefits both. A classic example is the cleaner fish. Sharks allow the small cleaner fish to clean their teeth without eating them. Rather than the weak dying, the weak may simply move somewhere else. Being stronger or faster etc. also is not always an advantage all the time. Sometimes real life is more "survival of the luckiest" than survival of the fittest.

Creationists acknowledge that natural selection is a real process in the living world, but natural selection cannot explain how macroevolution could happen. Why? First, because there are many mechanisms in the cells of every living thing that limit how much change is possible; they prevent genetic changes because they are harmful. Second, because the pressures on living things are not so predictable as the idea of "survival of the fittest" and so even if a particular beneficial mutation produced some dramatic new ability, there are enormous odds against it lasting in the population. Natural selection may determine what size or variety of dogs can survive in a particular area, but it cannot provide the information required for the complex changes it would take for a dog to evolve into some other kind of animal.

Note that in a Biblical view, the animal world was somehow affected by mankind's fall into sin in the beginning. This is important for answering many questions about living things. Exactly how life was affected by mankind's Fall into sin is not clear. But, the violence and

cruelty of nature is not the way life and ecology operated in the beginning. Living things did not need to eat each other in the beginning. We know this from Genesis telling us that God provided plants for food at Creation.

Two major things have had adverse effects on living things and on ecological relationships between living things. The first was mankind's sin against God, causing a sinful nature to be inherited by all humans from then on. God judged this sin partly by adverse effects on nature and living things (see Genesis chapter 3). The second thing that negatively affected the living world was the worldwide Flood of Noah's time. It is not surprising that there are organs in living things that do not function perfectly today, for example. There have been thousands of years of harmful mutations and adverse effects of living in a fallen broken world. The Earth is not a perfect habitat for living things as it once was. Many processes have caused imperfections in our bodies that are carried on from one generation to the next. Yet, in spite of this, God's marvelous design is still very evident in living things. The topic of intelligent design will be addressed more in a future issue.

Anyone who would like a list of sources on creation biology can write to me and I will send a list for no charge. This list will be a number of creationist sources and some noncreationist sources related to the content of this series. This series on creation biology will eventually be posted on my web site. The list of sources will be posted there with it.

Dinosaur Trackway Discovered.

In September of 2000 creationist geologist Don Patton and others uncovered a dinosaur fossil footprint trackway in the Paluxy river bed near Glen Rose, Texas. Though I had nothing to do with this and I am not a geologist, I thought it important to mention here. This dinosaur trackway is truly spectacular! There are 131 consecutive footprints in sequence in this

trackway, making it apparently the longest dinosaur footprint series in North America. They are very detailed, deep, and there are even ripple marks near some of them. The ripple marks are where water waves made ripples in sand and then that layer was very quickly buried by other material. Don Patton says he will be writing a detailed paper on the find. Don Patton sometimes leads groups to the Paluxy river to see the fossil footprints. If you have a group who would like to do this, I would recommend contacting Don Patton at, 813 Trails Pkwy, Garland, TX 75043, (972) 279-5325. Don's e-mail is dpatton693@aol.com.

There is a web site showing some dramatic pictures of this trackway: <http://www.bible.ca/tracks/turnage-patton-trail.htm>

Resources

Book: *Not By Chance!*, by Dr. Lee Spetner.

Some of the information in this newsletter is based on this excellent book. This may be the best book I have ever read on the problems with the mechanisms for biological macroevolution. I particularly like the way he addresses population genetics and information. It is well written and Dr. Spetner has had a very distinguished career in physics and biophysics. Spetner is an MIT graduate in physics. He has taught at Johns Hopkins University and other universities. He has published technical papers on information theory as it relates to evolution. I would say it is written at late high school level. A young person who has studied biology could follow most of it, though parts of it might be challenging.

Creation Family Magazine: *Creation Ex Nihilo*. The organization Answers in Genesis publishes two periodicals, a lay-level magazine for families and a technical level journal. *Creation Ex Nihilo* (quarterly) is a good source for getting informed on creation issues. It is easy to understand, done in full color, and has a section especially for kids in each issue. You will be amazed at the

interesting things in this magazine about nature, the Bible, and creation. I keep some extra back issues of it on hand. If you send me \$5 I will send you one back issue so you can see what it is like. I recommend it to families or anyone wanting a source on creation issues that is not technical. The subscription price is \$22.00 per year. You can contact Answers in Genesis directly at P.O. Box 6330, Florence, KY 41022-6330, (800) 778-3390.

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Creation Periodical for Kids: *Discovery*.

An organization called Apologetics Press publishes periodicals, and many other books and other materials defending Biblical Christianity. I have found their materials well researched and of high quality. Many of their materials are very inexpensive as well. They publish an excellent monthly magazine for kids on creation called *Discovery*. *Discovery* is an eight page color magazine. Included are articles about nature that are related to faith and the Bible. If you are familiar with the kids publication *Ranger Rick* (a secular periodical), this magazine is like a Christian version of that from a creation point of view and a Biblically conservative perspective. So, I would highly recommend it. A subscription is \$12.00 per year. There is a web site from Apologetics Press where you can download a free issue of *Discovery* as an Adobe Acrobat file, or you can request that a free copy be mailed to you. To contact Apologetics Press, write to 230 Landmark Dr., Montgomery, AL 36117, (800) 234-8558.

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