Ken Ham’s Aversion to ‘Life’ on Other Planets, Part I – What is Life?

Ken Ham recently proclaimed that he thought it was highly unlikely that “plant life” would be found on other planets. I wonder what he thinks the word “life” means in this context? For example, does living mean that plants also experience death? If so, how can he say that animals and man were allowed to eat plants before sin entered the world? Is there a difference being biological life and life as defined in the scriptures? If so what might be some of the implications be with respect to the prospects for finding “life” on other planets?

Is this alien life? It may look alien to you but this is a reconstruction of life on our own planet from the Cambrian Period based on fossils.

Life on Other Planets? First You Need to Know What Life Is!

No one is expecting to find this on Mars. At most “life” would be something like a bacteria. But is that “life” and how would that impact our view of life on earth?

We often assume that everyone knows what life is when we ask: is there life on other planets? But what do we really mean? Does having DNA make something alive? How about being composed of cells? What
about viruses? If life more than chemistry? If I grow some of my cells on a petri plate in what sense are they “alive”? We could go on and on but the point is that to begin to talk about life somewhere else it would help to know what life is right here on Earth.

Ken Ham of Answers in Genesis inadvertently stumbled into the problem of the definition of life in a recent blog post in which he claimed that if intelligent aliens existed on other worlds that they would condemned to Hell. Since his original statement he has made a couple of clarifying statements which in itself tells you just how much negative feedback he must have received not just from secularists but from his own constituents. In his clarification Ham makes it clear that the alien salvation question is purely hypothetical because he believes intelligent life can’t exist and thus their salvation is irrelevant since that reality will never be addressed. I think this is fine, his theological argument is logical though its correctness could be debated (see JW Wartick’s critique for further discussion). Honestly, I was a bit surprised at the uproar since his basic position on aliens and man’s position in the Universe have been promoted many times before by other creationists so Ham’s position was certainly not a novel.

I have no interest in discussing the prospects of finding intelligent life elsewhere in the Universe and what the state of their soul – if they even had one – may be at this time. What I am interested in is a more fundamental concept that Ken Ham demonstrated his naiveté about: the definition of life.

I have promised to discuss this issue of the definition of life many times. I’ve spent many hours researching the scientific and doctrinal issues but every time I have taken up the keyboard to write I find my frustrated by the complexity of the topic.

Ham’s post gives me a chance to crack open this thorny topic and reveal some of the subtle issues involved with how we should define life. Let me be very clear, I’m not talking about the meaning of life but rather defining what life is though detaching meaning from definition may not be possible which is yet another reason this is such a difficult topic!

**Ken Ham’s Nebulous Definition of Life**

In his recent pontification about the wasteful space program and its nefarious anti-biblical agenda Ken Ham refers multiple times to “life” on other planets without defining what the life may be. In addition, I have heard him toss the word life around in several recent interviews. But does he understand what life is? I expect he assumes that it is obvious. However, his word usages suggests to me that he is unaware of, or hasn’t grasped, the significance of writings on this topic even by his own colleagues. We will examine some of these articles in part II.

Let’s take a quick look at how the terms “life” and “living” get used in Ham’s original article *We’ll find a new earth within 20 years*. Be warned, I am going to nitpick some of his statements but only to illustrate that life is a slippery term and that most people use it as if everyone understands what it is.
“I’m shocked at the countless hundreds of millions of dollars that have been spent over the years in a desperate and fruitless search for extraterrestrial life.”

Here we see the use of the qualifier “extraterrestrial.” This refers to life somewhere not on earth. I would hope that Ham knows that most of those that search for evidence of extraterrestrial life don’t expect to find “intelligent” – whatever that means – life in 20 years but rather the evidence of any form of life whether that be bacterial, plant or something unknown to us on earth. But then you have to ask yourself, what constitutes a living thing? Living things are not defined as a list of what is living but by attributes that they share that make the things on that list alive. So what makes something alive and thus qualified to be on a list of living things? This is not a trivial question. There is no universally accepted answer.

I usually spend a full hour of my introductory biology class having students define life. After some period of discussion groups of students that feel like they can confidently tell me what is alive usually have spent the least amount of time thinking about the problem. The point is that there is no fixed definition because what could be considered alive is so diverse that no set of criteria can be produced that adequately described all of these organisms. Students have to realize that the scientific definition of life is artificial. It is a convenience to help us describe the majority of things that we intuitively want to categorize as being living versus being non-living. There is no universally accepted boundary between what is alive and what is not alive. That in itself should tell you how challenging this topic is. The text I use for my biology course is titled: What is Life. But there is no definition in the book. By not defining it, the implicit suggestion is that to know biological life you have to know all about biological diversity because there is no sentence that can encapsulate what life is.

“Christians certainly shouldn’t expect alien life to be cropping up across the universe.”

Here Ham uses the words cropping up to indicate an expectation that evolution will have brought about life in other places in the universe. Ham’s assumption is that evolution doesn’t work and can’t happen and
thus no Christian should expect that any life could crop up from evolutionary processes anywhere in the Universe. For Ham the only other option is that life is the result of fiat creation. But this does not exclude ex-nihlo creation of life on other planets. Can Ham be sure that God did not create life on other planets? And what exactly does he mean by "life" here? Biological life? Conscious life? Soulish life?

“Now the Bible doesn’t say whether there is or is not animal or plant life in outer space. I certainly expect not. The Earth was created for human life. And the sun and moon were created for signs and our seasons – and to declare the glory of God.”

Ok, so the Bible doesn’t say if there is life outside of Earth but Ham is pretty sure that it can be inferred that life is special to the Earth because the Earth, and man in particular, is the focal point of His creation. I can’t complain about the logic here but Ham interchangeably talks about intelligent life – something roughly equated to human life – with all living thing as defined by science rather than by scriptures. He thus makes out all life to be as important as human life which I am sure he doesn’t really believe. Even if the Earth is a special place for man why should it follow that it is also a special place for bacteria as well?

He places man at the center of the Universe and seems to believe that because man is the focal point of creation that nothing outside of Earth could be of any interest to God. But God has created some 10 billion planets in our galaxy alone! Each of these planets has a sun and probably a moon that may very well mark different seasons on those planets. Our own solar system has planets with seasons. These all declare the glory of God even though those seasons were not made for us. I have written about this before (More Planets than Stars – Exoplanets and Our Little Blue Ball) and will copy the relevant portion to the end of this blog post.

The fundamental question I would ask here is this: could not God have created plants, bacteria and fungi on other planets for God’s own pleasure and to declare his glory? Why must we believe that the Earth is
part of an exclusive home for one expression of God’s creation – living things? God created uncountable numbers of stars and planets, asteroids, moons etc., most of which we humans will never witness much less have any chance to appreciate. The Universe does not solely revolve around us literally, as once thought, or figuratively as Ken Ham believes.

If he could create so much diversity outside our solar system why does Ham handicap God to only creating “life” on Earth? I believe that part of the reason is that Ham believes that life is so much more complex than say a mountain or volcano which can be formed over time than “living” things. As a result God’s only method of creating life would have been by special creation, whereas the planets could have evolved their geological features over time – albeit over a very short 6000 years to appear as they do. We see this with the geology of Mars in which layers of rock there are not explained as special creation but the result of natural processes, albeit providential acting over time rather than in an instant.

But, if God can make rocks, water, sunshine, amino acids and various hydrocarbon on other planets that are all building blocks of life, is He unable or unwilling to make a sack of chemicals that we call bacteria on other planets? We don’t define bacteria has being conscious or having a soul. What can Ham point to that makes a bacteria different in substance to any other part of his material creation? They may exhibit more complex chemistry that most other pieces of His creation but why would being a more complex set of chemicals prevent God from creating bacteria on other worlds? Ham believes in ex-nihlo creation, if God could do it here it wouldn’t be hard for Him to do it elsewhere as well.

**Extraterrestrial life?Some Creationists say yes – but with a specific definition of life**

Interestingly, though Ken Ham is the most visible spokesperson in creationism today he may not represent the majority of his colleagues on this topic. Some creationists have slowly been backpedaling from this insistence that no life of any form will ever be found outside of the Earth. They do so for two reasons: The first reason is a hedge against finding life in our solar system system. Some creationists have been suggesting that life on Earth could have been transported from Earth to other planets in the solar system and Mars in particular. They see this as having happened just over 4000 years ago when huge meteorite impacts associated with a global flood caused chunks of earth to be strewn into space with some eventually falling to the surface of Mars thus seeding that planet with life. You can be sure that if “life” is found on Mars, creationists will lay claim to this as evidence of a global flood.

Here is just one example from the Gary Bates published on the Creation Ministries International website (Did God Create Life on Other Planets?):

> “The Bible’s ‘big picture’ seems to preclude intelligent life elsewhere in God’s universe (see main text). But what about bacteria on other planets for example? It’s possible that God made these, but exceedingly unlikely. What would be their purpose? The entire focus of creation is mankind on this Earth; the living forms on Earth’s beautifully balanced biosphere are part of our created life support system.
If bacteria are found elsewhere in the solar system, it will be hailed as proof that life can ‘just evolve’. However, we have previously predicted in print that in such an unlikely event, the organisms will have earth-type DNA, etc., consistent with having originated from here as contaminants—either carried by recent man-made probes, or riding fragments of rock blasted from Earth by meteorite impacts.

The second reason that creationists are changing their tone regarding extraterrestrial life is that many have opted to follow a biblical definition of life versus a scientific definition. Terms that refer to living things in the Bible are used for only select groups of organisms rather than all the ones that scientists would consider alive. As a result, by some creationists’ estimations—more about this in Part II—life as understood biblically may only include man and animals with a backbone—fish, amphibians, reptiles and mammals. I don’t have time right now to detail all of the reasons why but they would include things like having blood, flesh (muscles) and breath.

The number of described vertebrates is very small compared to all other species. It is estimated that 95% of all species are yet to be described but very few of them would be vertebrates and so the percentage of vertebrate species on earth must be less than 1% of all species.

This biblical definition of life leaves out 99% of all species of organisms alive today and more than 99.9% of all species that have ever lived. If plants, fungi, bacteria and some animals are not truly “living” then they cannot die. Ken Ham said he believed it was unlikely that “plant life” would be found on other planets but what did he mean by “plant life”? In part II we will look at this large group of organisms and ask how it matters how they are defined.

What About Angels?

Just tossing this one out there as a thought exercise in preparation for part II. Are angels alive and where do they live? If you answer yes and think they aren’t just bound to earth then you believe in extraterrestrial life don’t you? If you say no, then ask yourself by what criteria you would say no.

Next up: What is Life: Are Plants Alive According to the Bible?
Below is a copied portion of a previous post: More Planets than Stars -- Exoplanets and Our Little Blue Ball

**Man at the Center of the Universe?**

Today some Christians are again faced with making another paradigm shift because they have put themselves into another self-inflicted interpretive box. By putting man at the center and/or pinnacle of God’s creation, even if they have now given up having him at the physical center of creation, many have still assumed that our solar system and our planet in particular is a very special place. A common literalist reading of the creation account in Genesis seems to suggest God created the entire Universe in an instant and then took one piece of that creation, a formless and void chunk of matter, and formed it into a suitable habitat for man. By inference then, the earth must be a special place with properties that would not be expected to be found anywhere else in His creation.

Sometimes Christians have had a tendency to believe that all of creation was made for man. This results from the dominion mandate and the attention God places on man’s creation in the second creation account which places man at the center and at the center God’s creation. The creation of a being that can gaze at God’s creation and appreciate it for what it really is: the handiwork of God. We are a created being that can be a creative force via our being made in his image. We are also given the duty to protect and tend to the rest of creation. But man had taken these truths and distorted them putting himself on a pedestal seeking to worship himself as the ultimate pinnacle of creation. Man has been tempted to want to see all of creation as being for man. But did God create the vastness of the Universe for us for his own glory? Probably both, but consider a tiny moon circling a planet that circles a star that we can’t even see today on the other side of the Universe. Has this been created for us or with us in mind? Much of the universe will pass without man ever setting their eyes upon it or being aware of its existence. Even on earth, there are species that have lived in the depths of the ocean that have gone extinct before man even had the capacity to find them and they will never be known to man because they have left no trace of their existence.

**Billions of other earth’s in our own galaxy?**

It has been to God’s good pleasure that he created a Universe via means that have resulted in the formation of solar systems very much like our own. It has been my impression that many Christians have long resisted the idea that there could be other planets in the Universe other than those that are in our solar system. I don’t know why this is exactly, maybe because it seems to strike against the feeling that our solar system must be special? Should they not exist because they are not spoken about in Scriptures, an argument from silence. Of course Mars and the other planets of the solar system are not mentioned in the creation account either but they would be counted as visible points of light or “stars” in that account. Yes, I am aware that John 10:16 which speaks of Jesus having sheep that are not of this pen and that he must bring them to him as well has been interpreted by some as a reference to life on other planets but I
don’t think there is much merit to this interpretation of that passage. Or maybe this resistance to other worlds is partially an accepting of aspects of the fine-tuning argument for the universe as promoted by astronomer Fred Hoyle in 1959 (in Religion and the Scientists). Part of this argument suggests that only earth has formed (or been created from nothing) with specific attributes that are exactly right for earth. Even the planets, especially Earth, have been thought by many Christians to be so perfectly created that there would be another earth because life was formed here on Earth and there would be no need for such conditions anywhere else.

In the past 10 years there has been increasing evidence of planets circling distant stars. Many young earth creationists have tried to deny evidence of these planets. Again, I am not sure why because I have rarely seen any explicit reasons spelled out but I suspect that it is a knee-jerk response to the perception that if there are other planets then scientists will then claim this increases the chances of other life in the Universe. The hope seems to be that as long as there aren’t any other known habitable places in the universe then it seems safe to believe that there couldn’t be any other life. But if there are many places that have the right environment to allow life similar to what we know then that seems to threaten the special nature of life on earth and more importantly human life. If it is true that this is the fear of some Christians I would suggest that this is only because they have constructed an artificial expectation not born out of the Scriptures but out of man’s expectations for how he thinks God created or should have created the universe.

These expectations that the Earth is special place are now coming under increasing attack creating yet another crises among those that have, in my opinion, placed artificial limits on God’s creation. It is becoming harder and harder to believe that our physical solar system is a special place in the Universe.

Last week saw further results of the Kepler project to catalog evidence of exoplanets (ie. planets outside our own solar system). A summary of the finding can be found here (http://www.sciencedaily.com/releases/2013/01/130107162220.htm).

Using several statistical methods and a variety of observations scientists looked at over 2000 stars in our galaxy and found that nearly every one exhibits evidence of having a planet associated with it. Not only do they have planets but many have Earth-sized planets in orbit around them. Since the stars they
examined can be considered a random cross-section of sun-like stars in our galaxy it is not unreasonable then to extrapolate from that data to estimate the number of planets that are in our galaxy. They find that there could be 18 billion earth-like planets just in our galaxy. Furthermore, there are probably over 100 billion planets of all kinds (gas giants, small rocky planets etc..) in our galaxy. If we extend this to the entire universe the probable number of earth-like planets rises to something like a sextillion (that is a 1 followed by 22 zeros). Rather than being exceedingly unlikely that other planets exist, it now seems more than likely that there are more planets than stars in the universe making our planet seem a lot less unique to put it mildly. Increasingly better measurements and new ideas for how to detect planets now provide great hope that planets around stars near our star will be characterized with increasing precision. We will probably know things about the atmospheres and general compositions of some planets in the not too distant future.

The statistical/ fine-tuning arguments that some people have made, to insist that conditions for forming an earth-like planet require such a perfect set of requirements to make an earth, now seem to be quite dubious. So then, what do we make of all these planets – 18 billion planets like earth just in our galaxy alone!? How do Christians respond? As a said earlier, some have assumed (ether hopefully or based on their preferred reading of Scripture) that there would be no other planets. The lack of planets in the past has been seen as a blow to old age cosmological theories including big bang theory because stellar evolution models strongly predict the existence of other planets. Theories of star formation have long predicted that remnants of material didn’t become star material would come together to form planets in an “accretion disk.” If no planets could be found creationists could (and have done so) claim that stellar models were wrong. From this they could infer that the uniqueness of our solar system is due to special fiat creation only. Now a prediction of stellar theory is being show to be correct over and over again. The suggestion of evolutionists will be, of course, that if they were right about the existence of other planets then the opportunity for life to have evolved on these planets is also increased. Those that have put their eggs in the basket of hoping or believing that no other worlds would be found will find their anti-evolutionary argument undermined as well. I would argue that the presence of planets and the case against evolution should never have been connected for this very reason.

For old earth creationists the physical presence of other planets presents no difficulty though some of the metaphysical implications might still present some challenge. If the Earth is old and the Universe is old it is not unexpected that the process that God used to form the solar system would also be the processes by which other solar systems could have formed and in fact it would be surprising if no other planets were found orbiting other stars.

Of course the more sensitive theological issue is that of life on other planets be that in our solar system or on exoplanets. For now, let me say I don’t know if there is life on these other planets. I won’t say there can’t be and I won’t say there must be? I don’t believe that the Scriptures can be used to argue definitely one way or the other, although I do think a strong argument can be made that man, created in the image of God, is unique in the Universe. If evidence of life, similar to that here on Earth, is found to exist
elsewhere it will not shake the foundations of my faith because I have not tied my faith to an expectation of exactly how God created life and the Universe. I am not denying that God hasn’t told us some very explicit things about his creation, He has. What I’m emphasizing here is that I am trying not to hold my fellow Christians to articles of faith that aren’t explicitly taught in the Scriptures. Rather than be bound by the baggage of expectations for what the Universe must look like, this frees me to express my amazement at His creation rather than be in constant fear of what scientist might find next. Scientific exploration of the Universe is not a threatening exercise but one which takes us to greater and greater appreciation for this temporal-physical place we call home.

I hesitate to stop here but I also hesitate to continue. This is a complex topic and I don’t wish to oversimplify it. For now I would have you observe that the discovery of planets outside our solar system should not be any more challenging to the Christian worldview than the first realization that any of the points of light in our sky were not stars but rather planets in our own solar system. That discovery presented many of the same challenges that any planet orbiting another star does today.