

IS DEATH IN PARADISE POSSIBLE?

**How do Scripture and the Spirit of Prophecy
address some of the puzzling questions that inquiring minds
ask about Eden and the new earth?**

In the original earth as it was created and in the new earth, was there and will there be no decay and no death of animals or plants? Do all living things live forever in a perfect world? To attempt to answer this question may seem arrogant or presumptuous. In fact it would be, since we haven't been there and have been given very little information on the subject.

Instead, this will not attempt to answer the question so much as to clarify the issues so there will be less likelihood of settling for superficial answers. A survey of biblical and Ellen G. White accounts of the original creation and the re-created new earth, as commonly understood, helps to evaluate whether common ideas about paradise are actually

supported by these sources.

Some of these accounts may not be meant to be taken as literally as they are often interpreted. For example, Isaiah 11:6-9 was actually part of a prophecy of the fall and restoration of Israel and uses a lot of figurative language. However, utilizing the most conservative reading of these texts, even if they were not meant that conservatively, will strengthen, rather than weaken, this evaluation.

One danger to avoid is the acceptance of a new idea or approach just because it is new and tantalizing. The other danger just as necessary to

**Leonard Brand is Professor of Biology and Paleontology at Loma Linda University, Loma Linda, California.*

avoid is the persistent, unquestioning acceptance of an old idea just because it has been around so long.

In another article,¹ I suggested that the best way for Scripture and science to interact is for science to challenge us to consider new ideas and then let Scripture be the standard to help us evaluate those ideas. This article will offer scientific information suggesting a variety of options that can be compared with what God has said about the original creation and the new earth. It could be argued that equal weight should be given to science and revelation and be willing to recognize that science can show us that revelation is wrong.

The more experience I have in science and the more Jesus becomes real to me, however, the more naive that approach appears. For instance, our experience with death has been limited to one ecological system that involves death for every creature. Our ability to analyze the issues scientifically is limited to that one ecological system. We can suggest some of the implications of a different system, but we have no ability to determine whether or not God could make such a system work.

Some may claim that God, because He is God, can do anything, so He can make any system we may imagine work the way we think it should work. However, the more scientists accrue evidence revealing the astonishing extent to which we are

“fearfully and wonderfully made” (Ps. 139:14, KJV), the clearer it becomes that everything about God's creation was carefully planned to be “good.” In a multitude of instances, organisms work within very close tolerances, and if those tolerances are exceeded in some way, the organisms fall sick or die. This suggests that though there may be many ways God might devise to make a system work, there are many more ways that wouldn't work. God chose none of *those* ways, but only the “good” ways.

Examining several hypotheses and evaluating the factors for and against each one helps to avoid superficial reasoning; e.g., if the evidence is against one hypothesis, there is a tendency to jump to an opposite hypothesis without realizing that several other possibilities along the way may need to be considered.

The Revealed Information About Paradise

The following quotations are often cited by Adventists who comment on this question:

“[T]he fair earth, as it came from the Creator's hand, bore no blight of decay or shadow of the curse.”²

“As they witnessed in drooping flower and falling leaf the first signs of decay, Adam and his companion mourned more deeply than men now mourn over their dead. The death of the frail, delicate flowers

was indeed a cause of sorrow; but when the goodly trees cast off their leaves, the scene brought vividly to mind the stern fact that death is the portion of every living thing.”³

“I saw another field full of all kinds of flowers [on the new earth], and as I plucked them, I cried out, ‘They will never fade.’ Next I saw a field of tall grass, most glorious to behold; it was living green and had a reflection of silver and gold, as it waved proudly to the glory of King Jesus. Then we entered a field full of all kinds of beasts—the lion, the lamb, the leopard, and the wolf, all together in perfect union. We passed through the midst of them, and they followed on peaceably after.”⁴

“The wolf will live with the lamb, the leopard will lie down with the goat, the calf and the lion and the yearling together; and a little child will lead them. The cow will feed with the bear, their young will lie down together, and the lion will eat straw like the ox. The infant will play near the hole of the cobra, and the young child put his hand into the viper’s nest. They will neither harm nor destroy on all my holy mountain, for the earth will be full of the knowledge of the Lord as the waters cover the sea” (Isa. 11:6-9, NIV).

“The wolf and the lamb will feed together, and the lion will eat straw like the ox, but dust will be the serpent’s food. They will neither harm nor destroy on all my holy moun-

tain,’ says the Lord” (65:25, NIV).

“To Adam, the offering of the first sacrifice was a most painful ceremony . . . It was the first time he had ever witnessed death, and he knew that had he been obedient to God, there would have been no death of man or beast.”⁵

“One animal was not to destroy another animal for food.”⁶

“He will wipe every tear from their eyes. There will be no more death or mourning or crying or pain, for the old order of things has passed away” (Rev. 21:4, NIV).

“Pain cannot exist in the atmosphere of heaven. There will be no more tears, no funeral trains, no badges of mourning.”⁷

Several specific conditions in paradise are described above: (1) Several mammals are listed that will not hurt one another or us. (2) Poisonous snakes will not harm us. (3) Lions will eat vegetable matter. (4) Animals will not destroy one another for food. (5) Serpents will eat dust. (6) There will be no pain or tears. (7) Flowers will not fade. (8) There will be no decay.

These observations are sometimes interpreted to mean that no creatures or plants will ever die in the new earth, and that there will not even be any decay of vegetable matter. Is this conclusion the only one consistent with the brief prophetic comments?

Three possible implications of this issue will be addressed in this

If the new earth will be a re-creation of the original earth and its biological realm as it was before sin, then it is fair to compare our biological world with the biblical statements about the new earth and evaluate the implications of the changes that may have occurred as the result of sin. It is also assumed that God did not completely overhaul the nature of life after sin.

article: (1) Will there be a decay process that recycles nutrients? (2) Will no animals at all be eaten, or might this apply only to higher animals? (3) Will mammals and other animals not only be free from predation, but also live forever?

If the new earth will be a re-creation of the original earth and its biological realm as it was before sin, then it is fair to compare our biological world with the biblical statements about the new earth and evaluate the implications of the changes that may have occurred as the result of sin. It is also assumed that God did not completely overhaul the nature of life after sin, but that the biological world now is approximately as it was at Creation, except for the degenerative effects of sin. Thus, even though there may have been a lot of change, the changes that occurred will not be totally mysterious but will be at least potentially understandable as our scientific knowledge improves. It should be possible to suggest plausible genetic mechanisms for at least some of

the changes and to ascertain the nature of those degenerative changes in terms of decay and death.

What follows is not frivolous. We have been far too ready to make assumptions about life in paradise that are based more on theological speculations or fantasies than on serious consideration of the magnificent and intentional order of God’s creation.

Decay

What became of apple cores in the Garden of Eden? It does not seem reasonable to suggest that they accumulated and lasted forever. Do the statements indicating no decay in Eden refer to the decay involved in recycling nutrients, or is that trying to make them mean much more than was intended? In *Patriarchs and Prophets*⁸ the first signs of decay are given as falling leaf and drooping flower, indicating changes in the plant world, and these were the beginning of the spread of death to things that did not previously die.

The falling leaves reminded Adam and Eve that they too would die. Does the use of the term *decay* in these references and others like them refer to the bacterial breakdown and recycling of organic refuse (apple cores, fallen twigs, dung), or is this more likely a general reference to the intrusion of death and suffering into the creation? Perhaps we tend to read our specific, technical definitions into words that were used with a more general meaning.

If we interpret the statements discussing decay as referring to the specific process of bacterial recycling, this has a number of implications that should not be ignored. The original diet of human beings included fruit and grain. All fruit begins with flowers, and the flower petals die and fall off to make room for the fruit. Then, after the fruit is eaten, there is usually some waste part of the fruit that is not edible. An analogous process is involved in the growth and eating of grain.

If “flowers never fading” means that each individual flower will last forever, then there could never be any fruit or grain. If flower petals do fall, they will need to be recycled, or they will accumulate indefinitely. There likely would be other organic waste matter as well. Will nobody ever accidentally break a twig from a tree? Or will there be twigs that need to be recycled? Today, trees lose small twigs and lower branches as the tree grows.

All trees also make new leaves to replace old ones. Deciduous trees do this each year, but conifers are continuously replacing needles with new ones. Did this begin only after sin, or did trees always have a renewal process as conifers have? The same process occurs with animal hair (including human hair). Did animal hair never wear out in Eden, or were animals made to renew their fur coats periodically? What became of the old hair? Did every cell in the human body live forever, or were there continual renewal processes, as is presently true, with replacement of old cells and phagocytes that remove damaged cells?

Dung beetles have a life cycle centered on the recycling of dung. They form balls of dung that they bury in the ground, and then they lay their eggs in them. There are countless types of insects that live by recycling dung, dead wood, dead organisms, or other types of organic waste. Either they were designed for that function, or those adaptations have developed (evolved) since sin.

The Limits to Predation

The biblical statements indicating that mammals will not eat one another are certainly consistent with an absence of pain and suffering. Mammals and birds give indication of fear, pain, and suffering associated with predation. Also, those mammals and birds that have long-

lasting pair bonds sometimes show evidence of a sense of loss after a mate or a parent dies. Does this mean that no animals ever will eat one another? What about bats and anteaters, which have very specialized adaptations for catching and eating insects? Will they still eat insects? Did they eat insects in the Garden of Eden; or were they originally quite different, and have their

insect-eating adaptations developed (evolved) since sin?

One way to examine this question is to consider the highest level of life that can be eaten by other organisms without results that are evil in a moral sense: without causing pain and suffering.

What is it about death by being eaten that is evil? Since eating fruit was a part of God’s original plan for

Human beings	highest level of intelligence; spiritual nature
Mammals	intelligent behavior; some with strong bonds to mother or mate (love); some act as if they have some ability to perceive death
Birds	much more instinctive (automatic) behavior than mammals, but more intelligent than reptiles; some have bonds to a specific mate
Reptiles, Amphibians	more intelligent than fish, but without bonds to other specific individuals (love); no concept of death
Fish	vertebrates, but with largely instinctive behavior
Invertebrates	organisms with power of movement, but no intelligent thought regarding pain or fear
Sessile Animals	invertebrates that do not move around, having no sense of pain or death
Plants	sessile organisms; no brain or sense organs
Fruits	periodically renewed resource; produced in excess

us, it must be all right to eat some types of living tissue. The question is, What feature defines the limit of what can be eaten without introducing evil into nature? Animals move and plants generally do not: Is the ability to move the dividing line? Probably not, since some plants have at least some parts that move, and it seems as if it would take more than movement to define the limit of what can be eaten. If a bat eats an insect, is that a morally evil action, or were insects designed to fill a role in nature equivalent to mobile plants? Insects and other invertebrates will instinctively try to escape from predators, but this does not mean they understand death, or that they suffer when caught, as higher animals do. Invertebrates certainly do not have any sense of what death is, nor is it likely that they feel any loss at the death of another insect. Death of any kind now reminds us of our own mortality, but when humans have immortality in the new earth, perhaps we will look at things more objectively and recognize that the death of insects has no moral significance and causes no suffering to the insect.

In contrast to insects, the death of mammals has much more significance. Since baby mammals are very dependent on their parents for a time, the death of a mother results in the slow and painful death of her young. Some mammals have very

strong bonds between mother and young and between mates, and when a mate or parent dies, at least some mammals act as if they perceive something of the meaning of death. The pain and suffering caused by predation of mammals by other animals is certainly difficult to reconcile with a perfect creation, and all of the examples mentioned in the Scripture texts quoted above are mammals. Perhaps mammals were created with behavioral controls that prevented them from attacking one another, and these controls broke down as the result of sin.

If insects were subject to predation in Eden, where, between insects and mammals, was the limit of predation? The specific animals that are listed in the revealed descriptions of paradise are mammals, except for the statement that “one animal was not to destroy another animal for food.”⁹ In this statement was the word *animal* used in the precise zoological sense of animals as compared to plants? Or was the common layman’s use of the word *animal* to mean “mammal” closer to what she had in mind?

Some birds also have strong pair bonds, and according to Konrad Lorenz, some even react to the death of a mate in much the same way as a human would. Reptiles, amphibians, and fish are much more instinctive in their behavior, so perhaps their death does not have the moral sig-

An important question that still remains is: How much change is required to develop, from the created animals, the vertebrate predators that exist now? It is often assumed that this requires a lot of anatomical changes, but that is not necessarily true for many vertebrates. Possibly the change to a predatory lifestyle involved largely behavioral changes, with limited anatomical change.

nificance of that of intelligent, warm-blooded animals. However, the killing and eating of reptiles by other animals is still difficult to reconcile with a world of peace and love.

Some of the possible options are:

1. Only plants could be eaten; no animals were ever eaten, including invertebrates. Animals that are specialized for eating insects, like anteaters and bats and spiders, have developed those adaptations since sin; baleen whales have also developed their baleen structures and the rest of their filter-feeding mechanism; all filter-feeding invertebrate animals (a filter that catches food items, including other animals, out of the water) have changed from their original structure to become filter-feeders. Insect-eating plants, such as the pitcher plant and Venus fly trap, have also evolved those adaptations since sin.

2. Insects and other invertebrates were part of the food chain, along with plants. No vertebrate animals

were ever eaten by other animals. Behavior patterns that maintained this limit of predation began to break down after sin, along with human predation on animals. If invertebrates were originally a source of food for other animals, this eliminates the need to evolve all the filter-feeding and other mechanisms involved in the eating of invertebrates.

An important question that still remains is: How much change is required to develop, from the created animals, the vertebrate predators that exist now? It is often assumed that this requires a lot of anatomical changes, but that is not necessarily true for many vertebrates. Possibly the change to a predatory lifestyle involved largely behavioral changes, with limited anatomical change. A common objection to this idea is the observation that in mammals, there is considerable difference between the digestive systems of carnivores and herbivores. It is sometimes claimed that this difference between carni-

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vore and herbivore digestive tracts would have to have developed since the beginning of sin. Closer inspection doesn't seem to support this conclusion. Mammals can be grouped roughly into four categories, based on what they eat:

- a. Grass, leaves
- b. Fruit, roots, fungi, seeds, in vertebrates, occasional meat
- c. Carrion
- d. Mostly live animals

The big difference in digestive tracts is between group a and b, not between b and c, or between c and d. The herbivores in group a (cow family, deer family, horses and their relatives, rabbits and hares, one rodent subfamily, etc.) have specialized features for dealing with the indigestible plant cell walls in grass and leaves. These features include longer intestines, and generally some type of fermentation system in which bacteria and protozoa break down the plant material into substances that mammals can use as an energy source. Some also chew the cud—

chew and swallow the products from the fermentation chamber—including the cow family, deer family, and rabbits and hares. Perhaps the animals in groups b to d were originally all vegetarian (but not grass-eaters), and those that were anatomically capable of changing to meat eating made the change. The shearing and stabbing teeth of carnivores have perhaps been accentuated by natural selection, but their original function was the dismantling of fruit, etc. Some mammals that eat very little meat have large and powerful canine teeth. Also pet African lions and other carnivores have been raised on vegetarian diets and remained healthy—carnivores don't necessarily need meat.

3. This option is like the last one, but includes some lower vertebrates on the menu. Perhaps cold-blooded vertebrates could be eaten by other animals in Eden—at least those types that do not exhibit any parental care or other bonding-like behaviors. And perhaps the carrion

feeders like vultures have always been the garbage clean-up crew.

Death

The issue of the limits of death in paradise needs to be considered in its own right, aside from the question of predation. Some individuals believe that on the new earth, if we are about to accidentally step on an ant, an angel will be sure to move the ant aside. Surely angels are capable of being that alert, but is that really the way it will be? The discussion under the subject of predation is also pertinent here, in the sense that death has a different significance for invertebrates than it has for thinking, loving mammals. But other issues are involved as well. What does the tree of life mean for humans? We will need to eat of the tree of life in order to live forever. *Patriarchs and Prophets* says, "In order to possess an endless existence, man must continue to partake of the tree of life. Deprived of this, his vitality would gradually diminish until life should become extinct."¹⁰ Is the tree of life just symbolic, or does it have some real function?

My favorite hypothesis is that the fruit of the tree of life contains a set of as-yet-unknown vitamins that activate a renewal or replacement mechanism in the cells of our bodies that prevents aging.

What about mice, lizards, and blue jays—do they live forever with-

out eating from the tree of life? Perhaps the mice and other small animals gather from around the world periodically to eat from the tree of life, but that doesn't seem highly probable. Was there an alternate source of the "tree of life vitamins" for non-human animals? Otherwise it would seem quite inconsistent that humans would have to eat from the tree of life, but other animals would live forever without doing so. On the other hand, another possibility is that humanity's relationship to the tree of life is different from that of other animals, for the same reason that humanity has to use intelligence to accomplish many things that other animals do instinctively. If that is true, then perhaps humans need the tree of life, but other (non-rational, non-spiritual) animals live forever without the tree of life.

There are other implications, as well, if animals were originally intended to live forever. If that were true, then either the universe would have to expand forever, exponentially, so the excess animals could be moved to new homes, or else reproduction would have to stop when the earth was adequately supplied with animals. Of course this problem exists for humans no matter how other animal populations were controlled. If humans had not sinned, at some point human reproduction would have to have stopped unless the universe is forever

expanding.

The most direct statement pertinent to this question is this: “It was the first time he [Adam] had ever witnessed death, and he knew that had he been obedient to God, there would have been no death of man or beast.”¹¹ It would be helpful if we had been given a definition of just what was meant here by *beast*. Did it mean domestic animals, mammals, or what? The part of the statement that says he had not witnessed death does not necessarily mean that no death of lower animals ever occurred down in their nests or burrows, and if Adam had not become subject to death he might have had quite a different perspective on the death of an insect or even a mouse.

Some of the options for the limits of death are:

1. Not only was there no predation, but no animals ever died. No insects will ever get accidentally stepped on, and even mice live forever.

2. Humans and other vertebrate animals (at least the higher, warm-blooded vertebrates) live forever. Plants and invertebrates all have a genetically determined life span (as is currently true), after which they die and are replaced by new offspring.

3. Humans (in addition to heavenly beings) live forever, and they do so because they eat from the tree of life. Higher vertebrates (perhaps all

vertebrates) are not subject to predation, but all plants and most non-human animals have a genetically defined life span (as is currently true) and then quietly die and are recycled. Some mammals—and perhaps all—do not die. Carefully designed behavioral mechanisms limit predation to animals that do not suffer because of being killed, and death is limited to animals that do not understand the meaning of life and death. Synchrony in length of life within any given species reduces or eliminates the emotional pain of an animal losing a mate. Population control mechanisms are highly efficient and prevent overpopulation.

4. As in number 3, but all non-human animals are subject to death. They live out their genetically programmed lifecycle, then quietly die and are recycled.

Weighing the Possibilities

What do Scripture and the Spirit of Prophecy tell us about these options, at least if we accept the more conservative interpretations?

1. The following hypotheses, favored by many Christians, are consistent with a literal reading of what has been revealed, but may not be required by the prophetic writings unless we read something between the lines that is not truly there or insist on a literal meaning that may have never been intended by the authors. There seems to be no bibli-

cal reason to accept these hypotheses. The term *decay* can readily be understood as meaning the gradual degenerative effects of sin, not bacterial recycling. Ellen White’s exclamation upon being shown flowers in the new earth that ““They will never fade””¹² doesn’t sound like a theological revelation, but rather more like a spontaneous reaction to the beauty before her.

• There was literally no decay, and thus there were no animal wastes, no organism ever died, and each flower, plant, leaf, twig, and mosquito lived forever.

• Only plants could be eaten; no animals were ever eaten, including invertebrates. Insect-eating plants and animals that are specialized for eating invertebrates, like anteaters and bats, spiders, and filter feeders, have developed those adaptations since sin.

• Not only was there no predation, but no animals ever died. No insects will ever get accidentally stepped on, and even mice live forever.

2. The following hypotheses are not clearly refuted by even the most conservative, literal reading of the prophetic writings. We can only judge them according to our subjective concepts of what is morally evil about death and/or predation at various levels of life.

• There was generally no decay, but there were biological mecha-

nisms to care for the occasional fallen twig or leaf or flower.

• The flower-to-fruit cycle, the replacement of leaves and hair, the production of animal wastes, the continual replacement of old or damaged cells in organisms (including scavenging of these cells by other cells designed to do so), and the recycling of these were normal processes in Eden. After sin began to affect the Earth, there was a gradual loss of strength, soundness, health, or beauty; trees began to lose more leaves than the normal replacement, and perhaps flowers began to wilt and look ugly before falling off to make way for fruit. Or, perhaps, the statements about fading flowers means that there will always be beautiful flowers, not that each individual flower will last forever.

• Insects and other invertebrates were part of the food chain, along with plants. No vertebrate animals were ever eaten by other animals. Behavior patterns that maintained this limit of predation began to break down after sin, along with human predation on animals.

• Some lower vertebrates, in addition to the invertebrates, were eaten by other animals—at least those that do not exhibit any parental care or other bonding-like behaviors. And, perhaps, the carrion feeders like vultures have always been the garbage clean-up crew.

• Humans and other vertebrate

animals (at least the higher, warm-blooded vertebrates) live forever. Plants and invertebrates all have a genetically determined life span and then die and are replaced by new offspring.

- Humans (in addition to heavenly beings) live forever, and they do so because they eat from the tree of life. Higher vertebrates (perhaps all vertebrates) are not subject to predation, but all plants and most nonhuman animals have a genetically defined life span and then quietly die and are recycled. Some mammals—and perhaps all—do not die. Carefully designed behavioral mechanisms limit predation to animals that do not suffer because of being killed, and death is limited to animals that do not understand the meaning of life and death and have largely instinctive behavior. Population control mechanisms are highly efficient and prevent overpopulation.

3. The following hypotheses do not seem to be compatible with at least some Scripture and/or Spirit of Prophecy, at least with our common understandings of relevant statements. It may be that such statements were always meant metaphorically rather than literally, but this is a matter for literary analysis. This exercise has considered the question from the viewpoint of sci-

ence while assuming a basically literal meaning.

- Scripture has nothing to say on this issue.
- All nonhuman animals, including the higher mammals, are subject to death in a perfect world.

We cannot realistically expect to know answers to these questions until we get to heaven, and it is not important for us to have those answers. The benefit of this discussion is that it may help us avoid making claims not supported by careful study of the writings of God's prophets. Perhaps the tentative conclusions reached here will also stimulate biblical scholars to analyze the pertinent texts in further ways that will project yet more light on the subject. □

REFERENCES

¹ Leonard Brand, "Can Science and Religion Work Together?" *Origins* (1985), vol. 12, pp. 71-88.

² *Steps to Christ*, p. 9.

³ *Patriarchs and Prophets*, p. 62.

⁴ *Early Writings*, p. 18.

⁵ *Patriarchs and Prophets*, p. 68.

⁶ *Counsels on Diets and Foods*, p. 396.

⁷ *The Great Controversy*, p. 676.

⁸ Page 62.

⁹ *Counsels on Diets and Foods*, p. 396.

¹⁰ *Patriarchs and Prophets*, p. 60.

¹¹ *Ibid.*, p. 68.

¹² *Early Writings*, p. 18.

