

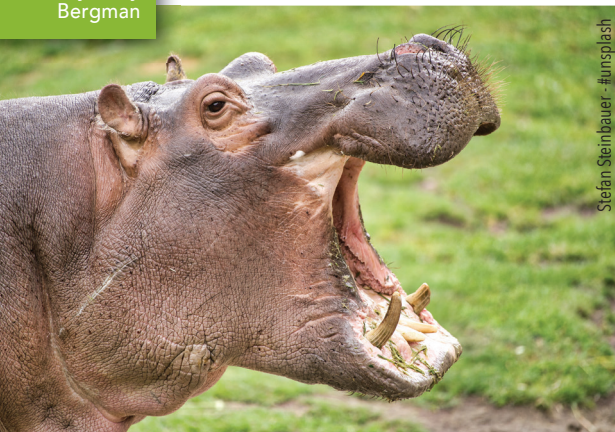
Hippos Giants That Appeared Out of Nowhere

Hippopotamus, called hippos, are monstrous, mostly herbivorous, semiaquatic mammals native to most of Africa. Only in the Sahara Desert are they not found. Their origins have always been a problem for evolution because they are like no other living animal. Only two extant species exist, the Nile hippo (*Hippopotamus amphibius*), and the pygmy hippopotamus (*Choeropsis liberiensis*). During the daytime they are aquatic, floating in the water world, and at the night-

though at times they may have to tangle with crocodiles. Their rotund body and short legs are capped with a large head and a wide mouth. They secrete an effective pinkish sun blocker and anti-biotic to protect their monstrous body which is prone to skin damage. The skin, which must be kept wet, lacks sweat glands and is covered with only a few fine hairs (Hutchins, 2003, p. 305).

Its large canines and incisors are sharp to cut and grind up the 100 pounds of vegetable matter they consume each night. Their teeth grow continuously, a requirement due to their abrasive diet. Their ears and eyes are on top of their head to allow them to see and hear the sights and sounds as they leisurely move around the water while 98 percent of their body is below the waterline. As mammals, they breathe air but can hold their breath for five minutes or longer when submerged. They also can sleep underwater, using reflexes that allow them to float up, take a breath, and sink back down while still sleeping.

by Jerry
Bergman



Stefan Steinbauer - #unsplash

time they are land animals consuming mostly grasses, soft plants, and some succulent fruit. (Macdonald, 1987, p. 507) They were named from the Greek words for *river horse*.

The Nile hippo is the third-largest land mammal, only elephants and rhinoceroses are larger. Their teeth can grow over two feet long. (Dykes, 2007, p. 50). Their size protects them from all predators except mankind, al-

Evolution

Their evolution has stymied evolutionists ever since Darwin. No other animal even closely resembles the hippos many unique features "causing the evolutionary-biologist considerable embarrassment at its origins" (Dykes, 2007, p. 52). The fact is the "fossil record provides little evidence of their ancestry (Hutchins,

Continued on page 2

Creation Weekend 2019

Each year in the fall, Creation Science Association of Alberta sponsors a weekend of teaching and fellowship. Every year it becomes more apparent that many Christian young people and others are confused about what the Bible tells us about the creation. They wonder whether the Bible tells us anything about actual beginnings and whether it matters. It becomes hard for these

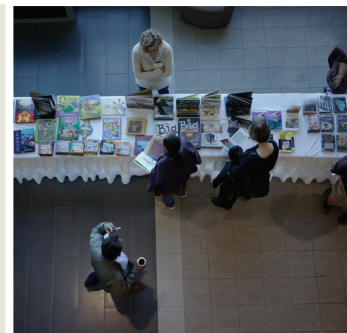


people to figure out how mankind was made in God's image if evolution (as they are taught in

school) indeed occurred. Are people different from animals if we descended from animal ancestors? Should our ethics reflect evolutionary values or Biblical standards?

In this milieu of uncertainty, the CSAA brings a clear message: good science conforms to the Bible. There is no need to be confused about the reliability of the early chapters of Genesis on account of many scientific

Continued on page 6



Hippos Giants That Appeared Out of Nowhere

Continued from Page 1

2003, p. 301). This is not due to a shortage of fossils, but the fact that “all fossils can be readily assigned to one or other of the modern genera.”

The only exception is a “dwarf hippo from the Pleistocene of Cyprus, which has been placed in a separate genus” and is likely an extinct hippo (Hutchins, 2003, p. 301). Given the large distinctive features of hippo bones, which are often well-preserved compared to most other animals, if evolution occurred many transitional features should exist in the fossil record (Dykes, 2007, p. 52).

Until 1909, based on their physical resemblance to pigs and their molar patterns, naturalists grouped hippos with pigs (Hutchins, 2003, p. 302). As they did more research this apparent similarity gave way to other theories at the turn of the last century. Their blood proteins, molecular systematics, and mtDNA suggested their closest living relatives are not pigs or any similar animal, but rather cetaceans – whales, dolphins and porpoises (Gatesy, J., 1997; Hutchins, 2003, p. 304; Geisler and Theodor, 2009). Other research using the cytochrome *b* DNA did not support this conclusion (Hutchins, 2003, p. 304).

Hutchins concludes there is “no general agreement on a hippo/whale link, though if such a link exists, it is probable a weak one.” (Hutchins, 2003, p. 304). This is another example of comparing one or a few genes and getting one result and comparing another gene and finding another result, illustrating DNA analysis is very suspect unless the entire DNA is compared.

Another problem is that hippo teeth are composed of a type of ivory, which, except for male narwhals, is not found in cetaceans, but rather the same material as an elephant’s tusks except, unlike the elephant tusks, is a higher grade of ivory that doesn’t yellow with age. For this reason, higher quality teeth, such as those of President George Washington’s, were made from hippo ivory. (Dykes, 2007, p. 51).

Hippos therefore remind us of the amazing diversity that we see in the creation, and in the case of these animals, the disparity (unique body plan and life-style) which separates them from all other creatures.

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Francesco Negro - Splash



Volume 46 / # 2 / Summer 2019

Creation Science Dialogue is a quarterly publication of the Creation Science Association of Alberta (CSAA).

Its purpose is to discuss the creation model of origin in terms of scientific details.

Subscription for 1 year \$8.00

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I remember that when I was a child, we tried to grow date palms from the pits or seeds in the fruit. None ever germinated. But that was then and time has passed. When we had fresh dates (with seeds inside) at Christmas a few years ago, I decided to try again. Accordingly, I took a deep margarine tub, punctured several holes in the bottom to drain out water, and filled it with good potting soil. Then each day, as the dates were consumed, I tucked their seeds into the soil. Maybe twenty or more seeds went into the pot. And nothing happened. But I kept watering. Then after eight weeks or more, a pure white shoot about 2 mm in diameter finally appeared. It looked like a growing shoot from a corn seed, only thicker. Next day another shoot appeared. It took several days for these to turn green. Eventually we had five young seedlings, each of which developed a bright green leaf. More leaves followed, one at a time. These plants are monocots, like corn and grasses and bamboo. That is why they send up only a single leaf at first.

When we went to put each seedling in its own pot, we discovered that the seed first produces a pure white fleshy root which grows “down to China” (possibly 15 cm or more) before a shoot ever appears above the soil. When I showed a teenager a picture of a date palm tree, he said “Good luck!” He did not think we would ever obtain a tree. Maybe not, but it would be fun to try. Date palms, you see, are very amazing plants.

Of all fruit trees, the date palm seems the most remarkable. Not only is the biology of this tree unusual, but its use extends back to the earliest historical records. As far as we know, this tree has always been cultivated by man. No wild populations have ever been located. The fact is, the date palm has such demanding requirements for growth, that it is difficult to imagine how these trees could survive on their own.

The Old Testament and New Testaments both contain numerous references to palm trees. Indeed this tree was eventually established in all the hot, dry regions around the

Mediterranean. It is an interesting fact that these trees are difficult to grow successfully. They grow only in very hot, very dry climates. Nevertheless, they need a lot of irrigation water applied directly to their roots. Natural rain or a humid climate is enough to ruin the fruit crop which takes six months to ripen. Not only was ancient man able to consistently irrigate his trees, but he knew that the female flowers had to be hand pollinated, otherwise there would be no fruit. You have to be convinced that this is necessary before you will chinny high up a straight trunk to bring male flowers from one tree to the female flowers in another tree.

In addition, planting seeds is not the best way to obtain good new trees. Even the earliest palm growers knew about “vegetative propagation.” These people knew how to encourage the growth of offshoots at the base of good trees. They then cut off these heavy rootless cuttings [as much as 13-18 kg (30 - 40 pounds) each] and planted them with plenty of water and well-rotted manure. With camels around, apparently manure was readily available. All these techniques sound very modern, as indeed they are. But they were practiced long ago too.

Thus, dates are a crop which cannot grow without knowledgeable people. There was never a time when this plant lived in the wild. Palm trees need people to care for them. With every date you eat, remind yourself of this fascinating fact!

Reference: Hilda Simon. 1978. *The Date Palm: Bread of the Desert*. Dodd, Mead and Company. New York. 158 pages.

For information on monocots see: www.create.ab.ca/dicot-dreamers-vs-monocot-meanies/#more-9541



Never Too Young for Winning Ways in Science Discovery

Everyone likes to communicate, to share what we have learned. And there is so much to learn!! While we all



by
Margaret
Helder

ashkan-forouzani - #unsplash

enjoy sharing our latest news with friends, sometimes this news involves events or objects observed in nature. Did you hear about the bear that so and so saw in their back yard?! Naturally you want to be the first to report this interesting piece of information. But as we get a little older, sometimes it is fun to make a study of an issue and be the first to report our findings to our friends. Nature is so full of interesting features and processes and events. Have you ever asked yourself, what is happening here and why is it happening?

The item in the previous issue of *Dialogue* related how to study conditions that contribute to the best growth of yeast cells. To really obtain a good understanding of what is going on, there are a few general guidelines which we should observe. When a student wishes to find something out for him/herself, then a structured study is necessary. In general, an individual can only be certain that he has found

something out if the study involves NUMBERS which can be compared. Therefore, the student must design his study so that there is something to MEASURE (weight, length, volume or rate) or to COUNT.

An ecological study may involve the regular recording of growth or activities of living creatures in nature. One of my daughters, for example, in grade four, counted the numbers of English sparrows feeding at a specific location at four times every day throughout the month of February. Temperature and general weather conditions were recorded at each sampling time. Such a study must be designed to answer a question. In the above case, the question was when do sparrows feed most actively? In case you are holding your breath to find out the answer, the sparrows were most hungry at the end of each day. They seemed to be less worried about warmer or colder conditions.

Experiments are the most challenging of science projects. The student must select a topic and ask a question. He must also decide what he expects the answer to be. This is called formulating a hypothesis and may perhaps be based on some research in books. Into a notebook the student should record equipment to be used, and the procedure for the experiment. As the study progresses, all observations should be recorded in the notebook too. Each test should involve

the comparison of only one condition. For example, if the student were studying the effect of watering rate on grass growth, then light, fertilizer, grass species composition and all other conditions would have to be the same for all the test plots. Only the amount of water would vary between the test plots. One plot would be designated the control, and the others would be compared to it.

Measurements might involve growth height or wet weight of representative plants, or dry weight of representative plant specimens (pulled up and later discarded). Once you choose one system of measuring, you have to stick to it. Measurements would be regularly recorded. At the conclusion of the study, the results should be examined. For example, an average growth rate per plot can be calculated and the results displayed in graph form. On the basis of the results, the student must decide whether the results were as expected or not. Just remember, without numbers you cannot come to a conclusion. There is nothing to discuss with a mere appeal to apparent effects!

There are few things as satisfying as discovering some new information about the world around you!

With one successful study to your credit, you will soon be looking around for other phenomena to study! Science fairs come up about once a year, for example, so why not have a suitable project chosen ready to launch? A well conducted study is a testimony to others that Christians value good information!

www.create.ab.ca/learning-lots-all-year/#more-9622



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A friend, a while ago, articulated some possible critical arguments concerning advocacy for young earth creation which are based on observations from nature. Here are some reflections on that conversation.

Point 1



The greatness of God as Creator is to be found in Scripture and not in nature.

Response: That is not to suggest (one hopes) that there is no point in studying nature. As per Scripture, we know that God made all things. Since this is so, all nature reflects God's creative work and awesome person. God tells us details of the creation in Scripture. We expect that we will see these features reflected in nature. It is the position of creation apologists that testimony to the work of God in nature is an invitation to listen to God in Scripture.

Point 2



Re fancy features of design like the Fibonacci series which we see in the arrangement of parts in a sunflower head or the rosette of leaves in an Agave plant. Some creationists use this feature as an argument for the creation model.

Query: What does it matter if some organisms display fancy features like the Fibonacci series? Does this mean that other organisms are less wonderful?

Response: The Fibonacci spiral pattern appears when

each new component (leaf) begins its development at an angle precisely 137.5 degrees around the stem from the previous leaf. This means that each leaf is displayed to the sun at best advantage for the space available.

The point of discussion on the Fibonacci series is that this mathematical feature is an artistic extra. It is not something that would be expected to confer a survival benefit on its possessor. Therefore, there would be no point for the plant in developing this feature through an evolutionary process.

The creatures that do not display this mathematical feature are not less wonderful. They display different characteristics which enable them to deal with the challenges of their environments. What we see is richness and variety (biodiversity) in the creation. The diversity in any one group of creatures is far above what would be needed to simply allow them to survive in their ecological niche. Consider the Emerald Ash Borer for example, its colour is amazing, but it could survive just as well if it were less spectacular to look at! The beauty and diversity that we see is a testimony to the work of God!

Point 3



Re the possibility of clumsy design.

Query: Are there clumsy alternatives to good design which would argue against the work of the Creator?

Response: This argument is in the eyes of the beholder. Many advocates for evolution claim that we do see negative features in nature. They claim that compared to what would be best, the human eye is wired backwards, that the human back is poorly designed, that the panda's thumb is poorly designed for the animal's needs, and so on. In each case there are good arguments that the feature in question is actually misunderstood and that the design is efficient and good. Of course, nature also displays death, disease, predators and disasters. These conditions came from the fall of man and were not a feature of the original creation.

Continued from page 1

pronouncements. And there is no need to feel conflicted over social standards that are clearly contrary to the Bible. For those who are looking for answers, or just plain interesting presentations, this weekend is for you! Mark the date on your calendar and plan to attend with family and friends.

The theme for Creation Weekend 2019 is “What the World Needs Now is Truth!” In this context the movie *The Riot and the Dance: a Cinematic Celebration of Creation* is scheduled to be shown Friday evening October 25. This 84 minute film features Dr. Gordon Wilson who was our very appreciated speaker at Creation Weekend 2018. With its beautiful portrayal of the lives of a wide variety of animals, this film is ideal for families and young people’s groups as well as everybody who loves nature. What do the lives of these creatures tell us that is relevant to Genesis? Come, see the film, to find out!

The featured speaker this year is Dr. Margaret Helder, President of CSAA. Dr. Helder came to Alberta from Quebec and Ontario. She studied botany at Western University, earning a Ph.D. in botany there. She even described a species of fungus new to science (*Chytridium deltanum*) named for the Delta

Marsh in Manitoba where she conducted her field research in the summer. After that she went to Brock University to teach biology. There she met her husband John.

The Helders have lived in Alberta 40 years and during most of that time they have been very active in CSAA. Dr. Helder has lectured in every Canadian province from Ontario to B.C, in two American states and in Western Australia and she testified as an expert witness on origins at a court trial in Arkansas. One of her long-term projects has been the provision of creation-based commentary in a *Tour Guide to the Royal Tyrrell Museum* (now in its fifth edition). Most recently her *No Christian Silence on Science* (book and companion study guide) has been published by CSAA. The book provides a lot of interesting discussions about nature, the details of which are not widely known. The book also includes discussion of environmental and bioethical issues, the importance of evaluating scientific pronouncements (that does not mean they are all wrong, it just means that you should critically consider whether they are wrong) and how to handle conflicts in any classroom. Dr. Helder also has conducted numerous field trips and hands on science classes for families.

Dr. Helder’s presentation “God’s Signature in Creation Demands a Response.” The creation displays artistic and functional attributes which convey a powerful message. We have long understood that living creatures display

component parts that work beautifully and are similarly integrated into a whole body that allows the creature to survive the challenges of its environment and successfully produce off spring. In addition to this however, nature is beautiful! The artistic details of microscopic components are even more beautiful, in many cases, than the outward appearance of the creature. Topics like this are not only fun, but they enhance our appreciation of God’s handiwork.

Dr. Helder’s presentation “Setting One’s Compass by Biblical Standards” deals with the many issues that plague modern society. Just as a compass indicates the direction to follow, so the Bible provides standards for us to follow in our interactions with other people. Issues like abortion, euthanasia, treatment of minorities, land use, energy policy, and food security all come under this large umbrella. Compare this discussion with what you have been taught. Christian choices are going to look a whole lot different from society’s choices.

The venue for Creation Weekend (October 25 & 26, 2019) is Immanuel Canadian Reformed Church, 21112 35 Avenue NW in Edmonton.

Plan for this weekend which promises to be richly rewarding in insights and fellowship!

Admission is free!



Insects! Some people give them a wide berth on principle. Nasty, creepy, crawly flying things! Even the magnificent giant moths elicit only screams from some people. But the insects under discussion are guaranteed to cause no such sensation. Initial disbelief, amazement, titillation and delight are the sensations to be expected from an encounter with these exotic ‘bugs’.

Among the insects, at least 800,000 species have been described. One would expect plenty of variety in life-style and shape within a class this big. Indeed, this is the case. Articles on insects are always well illustrated with exotic beetles, flies and butterflies. Among these, cicadas represent an insect family which is seldom discussed on the prairies for the simple reason they do not live there. But in eastern and central Canada and in the United States (except the northwest quarter of the country) summers in woodlands reverberate with the loud clatter, clatter of male cicadas’ courtship calls.

Cicadas are heavy-bodied insects with similar appearing membranous wings which arch over the abdomen when the adult sits at rest. Most representatives of this group live in the tropics or subtropics. Among those who seek to grow trees or shrubs in these parts of the world, cicadas are highly unpopular. The immature or larval stages (called nymphs) lie in the soil and dine on tree roots. They eat plenty too because their development

is slow. Depending on the species, it takes between 4 and 20 years to produce a winged adult. The adults remain above ground and few live more than a week.

Thus far, little about cicadas seems guaranteed to produce sensations of delight among the readers. However in the grasslands of east Africa, there live some cicadas called flattid bugs with wings that are coloured coral, yellow, white or green. These creatures are small as cicadas go, at most about 1 cm long. The remarkable thing about these insects is their colonial habit. The offspring of individual broods remain together and they arrange themselves on sticks or stems in such a way that they resemble spectacular flower clusters (inflorescences). Some experienced botanists have been fooled by these insect groupings which resemble lupine, broom or hyacinth flowers.

The whole idea of insect inflorescences gave Robert Ardrey, author of *African Genesis* (1961 Collins p. 66) “mental indigestion.” While protective imitations (mimicry) exist widely in nature, particularly among insects, they almost always involve only single individuals. The co-ordinating of a whole colony of individuals into a unit of camouflage is a situation al-

most unheard of in nature. During the 1950s at the Cornydon Museum in Nairobi, broods of one cicada species were hatched in captivity. And from each batch of eggs there would consistently emerge at least one individual with green wings, and several with in-between shades of green as well as the mass of coral coloured individuals. Those with green or partial green wings always took up a position at the tip of the inflorescence, thereby simulating unopened buds at the tip.

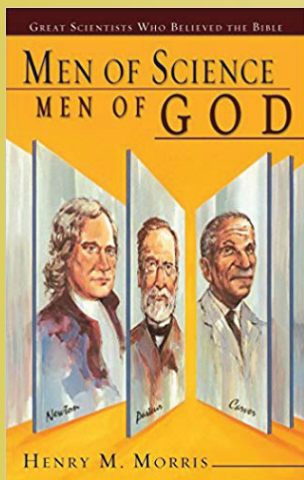
The idea that evolution could bring about such perfection, gave Ardrey a “prickling sensation in the scalp.” It seemed amazing, almost unbelievable, to him that evolution could have produced colonies of insects which know how to imitate flowers. Even more amazing still is the fact that the coral flower which the insect imitates, *does not exist in nature*. Ardrey concluded that the flattid bug community had created the flower form. Now that sounds an awful lot as if a separate creative intelligence placed the “know-how” in these insects, doesn’t it? Indeed that is the only logical conclusion. Not only did they require appropriate colours and shapes, but they had to know how to arrange themselves on sticks or stems. Cicadas of the flattid bug group, were definitely created!

Reference

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Reprinted from *Dialogue* volume 13 #1 March 1986.



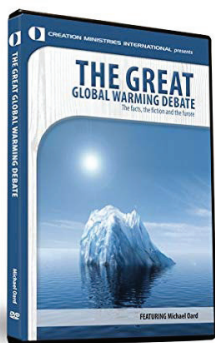


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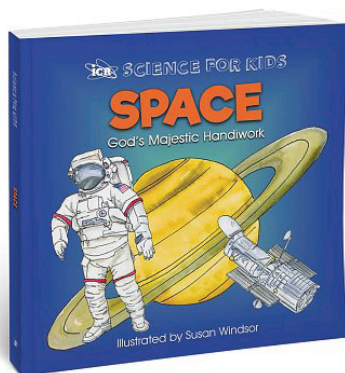


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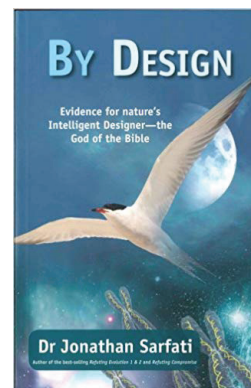


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