CREATION SCIENCE

Volume 40/2 MAY

t was Rene Descartes (1596-1650) who famously said "Cogito ergo sum" or "I think, therefore I am." Obviously thinking at that time was an activity held in high esteem. And we might suppose that thinking is a skill that we all appreciate today too. That however is not necessarily so. Consider for example the recent case of American philosopher of science Thomas Nagel. You might expect that thinking is what philosophers are paid to do. That is what Dr. Nagel thought too. Thomas

Sometimes Thinking Can Make You Unpopular!

Nagel (b. 1937) has enjoyed a long and esteemed career among the intellectual elite in the United States. His 1974 article "What is it like to be a bat?" is regarded as a modern classic in the philosophy of the mind. Apparently it still is popular in undergraduate philosophy classes. In addition, Dr. Nagel, over the years, has published on a wide variety of topics focusing particularly on philosophy of the mind and consciousness.

It is hard to understand this man's present unpopularity with other academics, especially in science. His beliefs are so typical of the group: atheist with radical left political leanings. Nevertheless, when he published his 2012 title *Mind and Cosmos: Why the Materialist Neo-Darwinian Conception of Nature is Almost Certainly False* (Oxford University Press), his colleagues

By Margaret Helder declared that he was an embarrassment and a traitor. It appears that when Dr. Nagel articulated some negative thoughts about Darwinism and menutoion and kilka a

evolution, his reputation sank like a stone. It is evident that no matter how eminent a person is, he is not allowed to question popular views concerning evolution.

Dr. Nagel did not undergo a change of mind. He is still an atheist, who once declared in a famous chapter entitled "Naturalism and the Fear of Religion" (in The Last Word. 1997. Oxford University Press): "I want atheism to be true ... It isn't just that I don't believe in God and, naturally, hope that I'm right in my belief. It's that I hope there is no God! I don't want there to be a God; I don't want the universe to be like that." (p. 130) Thus when his fellow academics criticize him as a selfcontradictory idiot, they cannot blame background attitudes different from their own. The British publication, the Guardian, ranked Mind and Cosmos as the "most despised science book" of 2012. Apparently the reviews were numerous and overwhelmingly negative. It seems that nobody is allowed to think for themselves when it comes to Darwinism. So what precisely did Dr. Nagel argue?

He began by discussing the view that everything in the universe came about only as the result of the operation of processes working on matter. This view, he said, does not make sense. Yet scientists insist that this is the only possible explanation for everything. (p. 4) Thus he elaborates: "I realize that such doubts will strike many people as outrageous, but that is because almost everyone in our secular culture has been browbeaten into regarding the reductive research program [process and matter only] as sacrosanct, on the

ground that anything else would not be

science." (p. 7)

Continued on page 6

Make the most of *Creation Weekend* 2013.

reation Science Association of Alberta is delighted to announce that

biologist and philosopher Dr. Paul Nelson has agreed to be our featured speaker for Creation Weekend, Friday evening and all day Saturday October 18 and 19, 2013. Dr. Nelson is a friendly and non-confrontational individual who makes the latest information in biology come alive in his lectures. He not only de-



scribes the issues, but he tells us what the significance of the material is.

Many Christians have recently been impressed by Dr. Francis Collins and his book *The Language of God*, which argues that humans are descended from chimpanzees. Moreover Dr. Collins' influential colleagues at Biologos promote similar views. But Dr. Nelson provides excellent

answers to all these evolutionary views! He is equally at home discussing science in academic settings or in churches. Obviously this is a speaker do not we want to miss!



Dr. Paul

Nelson has long been involved in the creation/evolution controversy, in fact he grew up in that milieu. His grandfather, Byron C. Nelson (1893-1972) for example, was a theologian and author, influential as a mid-century critic of Darwinian evolution. His grandson Paul, already as a university student, began to write *Continued on page 7*

Diamond Jubiles Molecule

t was in April 1953 that Frances Crick and James Watson published their proposed description of the DNA molecule. As they anticipated, biology was forever changed. Now biologists had a molecule which they could study, which stored hereditary information. The 1960s saw the emergence of the 'standard model,' which held that DNA codes for proteins which determine the characteristics of each creature. However on the occasion of the 60th anniversary, one commentator in the journal Nature declared: "We do not know what most of our DNA does, nor how, or to what extent it governs traits." (496 #7446 p. 419). As a result, he said, "... the usual tidy tale of how 'DNA makes RNA makes protein' is sanitized to the point of distortion." And he continued, "In other words, we do not fully understand how evolution works at the molecular level." This is the crucial issue as far as most scientists are concerned. While the details of the workings of DNA are interesting, the big question is how do these discoveries impact evolution theory?

A number of discoveries concerning DNA have brought scientists to the point where they realize that they have more questions than answers concerning inheritance and control of the characteristics or traits of an organism. One of the most dramatic recent studies was Feb. 2013 issue). Concerning the ENCODE results, commentator Philip Ball in Nature declared: " projects such as ENCODE are showing scientists that they don't really understand how genotypes [genetic information] map to phenotypes [organism traits], or how exactly evolutionary forces shape any given genome [DNA information content]." (p. 420)

One of the ENCODE discoveries was that many genes cooperate together in complex networks. If such fancy systems determine what a creature is like, on what level does natural selection have an effect? It seems unlikely that it is at the level of the details in the chemical content of the DNA. Thus this commentary in Nature says: "In short, the current picture of how and where evolution operates, and how this shapes genomes [information content in DNA], is something of a mess." (p. 420) It is apparent that scientists don't really understand very much about heredity. Thus Philip Ball concludes: "... old arguments, for instance about the importance of natural selection and random drift in driving genetic change, are now colliding with questions about non-coding RNA, epigenetics and genomic network theory. It is not yet clear which new story to tell." (p. 420) When it comes to "stories" or speculations however, some critical thinking is very much in order!



2 - Creation Science Dialogue - Spring 2013



Volume 40 / # 2 / Spring 2013 -----

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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Why We Care about Design

n interesting new book has appeared which features questions and answers and discussion on design in nature. The author informs us that there are two ways to interpret the amazing details of how creatures survive and reproduce in their environments. Firstly, we can consider if the component parts of the organism, or even a whole organism itself, actually fulfill a purpose. If the characteristics promote the success of the creature, then the answer is yes. Next we can ask ourselves what might be the best explanation for the fit of the creature with its environment. It is the case that people intuitively link such purpose with intelligence planning, declares the author. Thus we can conclude that the creature was designed for its role in nature. Here we see an inescapable

example of God's work of design since design flows from a real designer.

The Apostle Paul wrote about this. He declared that God's invisible attributes are "clearly seen, being understood by the things that are made." (Romans 1:20) Thus this book argues that the multitude of examples of design which we observe, are clearly seen as testimony to God's work as creator and designer.

There is another approach to design that certain prominent evolutionists promote. These people declare that there is no design to be seen in nature, only apparent design. That means that while characteristics may appear to be designed, they really

thing was designed, because otherwise a designer would have been required. The author uses engineering concepts to demonstrate that certain features of organisms (like molecular machines in living cells), did not just appear, but they were carefully chosen to fill a need. And he declares concerning the evolutionary view: "... how do words like 'appeared' explain design? Just like magic, the use of this word invokes mysterious power within unseen universes that are capable of leaping over enormous scientific obstacles without having to provide any scientific consideration for how a particular physical result was achieved." This is not intellectually satisfying.

In this book the discussion of design, broken up into short chapters, concludes that the doctrine of who God is, is based on His work of creation. There then follow questions which go with each chapter, along with detailed answers. The author hopes that the book will be used as a supplement in the classroom or as the basis for a discussion group.

The actual examples of design which were included, such as the bones of the middle ear, conferred more interest and zip to the discussion. I would have liked to have seen more such examples provided. Since the ideas are somewhat abstract, and are best understood when one has some background knowledge in biol-

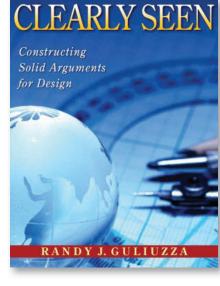
came about without any intelligent input at all. Rather, the features just happened to appear through the agency of chance processes.

The author of *Clearly Seen* has set about to help people understand these contrasting views and why the idea of design is important to a Christian worldview. Evolutionists, of course, deny that any-

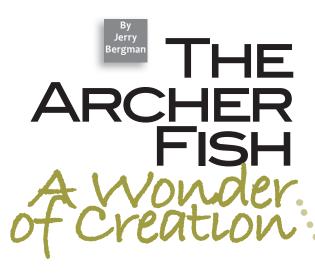


ogy, this book is perhaps best suited to high school and adult reading audiences.

Randy J. Guliuzza. (2012). *Clearly Seen: Constructing Solid Arguments for Design.* Institute for Creation Research. Paperback, full colour.



he archer fish (*Toxotes jaculatrix*, from ejaculator fish) — named due to its expert archery skills— is one of the most amazing types of fish known to humans (Smith, 1936). When first researched by scientists in the 1920s, researchers "could hardly believe their eyes" at its shooting ability (Pinney, 1977, p. 3). The existence of the fish was actually first reported by explorers in 1764, but scholars could not accept the reports of the existence of this amazing fish (Lüling, 1963, p. 100).



These seven-inch long fish are most well-known for accurately knocking insect prey out of overhanging vegetation with a jet of water six times more powerful than the fish's muscles. To achieve their feat they must first position themselves in the water with their snout just breaking the water surface, leaving their eyes just below the surface. They then aim their jet spray by the use of their superbly designed binocular vision to accurately determine their prey's location.

If one eye is damaged, their aiming skill is lost. The archer fish modulate their water jet's velocity to create a single large water drop that strikes their prey with enormous force. This design avoids the requirement for specially designed internal structures to store large amounts of energy.

How the Water Gun Works

The water shot is produced by the fish compressing its hard bony tongue against the roof of its mouth, forcing water out the gun-barrel-like groove in the archer fish's mouth roof by rapidly snapping their gill covers shut (Pinney, 1977, pp. 2-3). It usually accurately strikes its target on the first attempt at distances of up to 2 to 3 feet! To position itself to hit its target the fish is a versatile swimmer—it can even swim up and down and backwards to position itself to make its line of vision line up with its prey (Pinney, 1977, p. 3).

So complex was its design that the mechanism the archer fish uses to produce its water jet had been researched for decades. In 2011 scientists finally largely determined how it works (Vailati and Cerbino, 2012). They now know that a large amplification

> of the fishes' muscular power occurs outside of the fish to cause a very powerful impact of the water jet with the prey. Alberto Vailati and his University of Milan colleagues have provided the first scientific explanation for how archer fish are able to generate such powerful jets to capture their prey. To study the mechanics of the water jet, the authors used high-speed video recordings of archer fish knocking insects out of plants.

> They found that archer fish generate this power externally using water dynamics rather than by specialized internal organs. Some animals, such as chameleons and salamanders, store energy in their body's collagen fibers and abruptly release their stored energy to project their tongues outward at high speeds. Previous research on archer fish have ruled out the use of these specialized organs as the source behind their powerful water jets.

Excellent vision in its typical muddy water environment is also critical to hit its target. To achieve this vision the archer's eye retina is far more complex than that of most fish. The cones for daytime vision number only 8 or 9, but the rods for vision in muddy water, where they normally live, number a whopping 217. The archer fish vision ability is such that they can extinguish cigarettes with their water jet in total

darkness! The archer fish must also solve the *refraction* problem, the bending of the light rays that occurs as the light rays enter the water, causing objects to appear where they are not. It achieves this feat with remarkable accuracy (Myers, 1952).

Practice Makes Perfect

As the young fish de-



velop, they begin practicing on targets above the water in their natural habitat (Brodie, 2006, p. 218). The tiny fish first succeed in squirting their jet only a few inches high. As they mature they learn to shoot a stream of water as far as fifteen feet! Adult archer fish normally shoot down their insect prey at a range of less than a meter.

To strike its moving target, the fish must compensate for the target's (the insect's) speed and the changing angle between the fish and its target to determine the refracted level (how much the light is bent at the air-water boundary). They also must compensate for the effect of gravity on both the fish and the water stream (Brodie, 2006, p. 218).

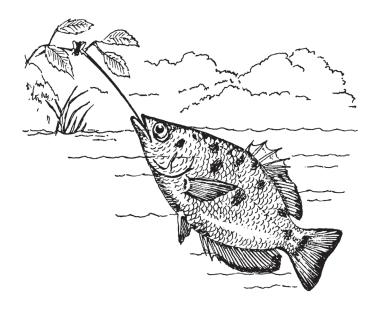
These variables require computing a set of calculations that are done by human mathematicians using calculus. Research has also determined that archer fish learn to make these calculations by observing skilled fish practice their art. All of this is done by a "primitive cerebrum" which researchers have discovered is not primitive at all! (Brodie, 2006, p. 218).

The Problem of Archer Fish Evolution

If the archer fish gradually evolved its remarkable ability, it must have done so because it has helped their survival. Yet not one other fish that swims side-by-side with the archer, and also feed on the bottom in the water or on the surface, has also evolved this ability. Nor are any intermediates known. All fish either possess the compete set of biological systems to shoot insects out of the air, or lack the entire set.

Another major problem with the evolution explanation is that archer fish most often feed on insects it finds on or just below the water surface. It can even jump clear above the surface to take insects on the wing. It can also feed on insects that sink a few inches into the water (Schuster, et al., 2006). For this reason it does not need to shoot insects out of the air to survive, and can survive quite well without ever doing so. In fact, most of its food is usually obtained without ever using its water gun. It appears its archery ability is exercised mostly for sport or variety! Archer fish expert, Professor Lüling, recognized this problem

writing: "Toxotes depends largely on food it finds on or below the [water's] surface. It prefers insects that have fallen to the surface, but it will also take food that has sunk a few inches into the water. This raises an interesting question for evolutionary theory: Spouting, if it is so unimportant, can hardly have been a significant factor in the survival of the species or in selection and differentiation within the species." (1963, p. 100) Consequently, natural section cannot account for their amazing ability. Nor can evolution account for the unique ability of this marvelous little fish! Although normally existing in the waters of Australia and Southeast Asia, because of their unusual skill they are a popular attraction in aquariums throughout the world.



References

- Brodie, Chris. 2006. "Watch and Learn: Benchwarming Pays Off for the Archer Fish." *American Scientist*, 94(3):218.
- Lüling, K. H. 1963. "The Archer Fish." Scientific American, 209(1): 100-109. July.
- Myers, George S. 1952. "How the Shooting Apparatus of the Archer Fish Was Discovered." *The Aquarium Journal*, 23(10): 210-214; October.
- Pinney, Roy. 1977. "The Amazing Archer Fish." Scholastic Science World, 34(4): 2-3, October.
- Schuster, Stefan, Saskia Wöhl, Markus Griebsch, and Ina Klostermeier. 2006. "Animal Cognition: How Archer Fish Learn to Down Rapidly Moving Targets." *Current Biology*, 16:378-383, February 21.
- Smith, Hugh M. 1936. "The Archer Fish." *Natural History*, 38(1):2-11; June.
- Vailati A, Zinnato L, Cerbino R. 2012. "How Archer Fish Achieve a Powerful Impact: Hydrodynamic Instability of a Pulsed Jet in Toxotes jaculatrix." *PLoS ONE* 7(10): e47867.

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He continued by turning his attention specifically to evolution: "the prevailing doctrine - that the appearance of life from dead matter and its evolution through accidental mutation and natural selection to its present form has involved nothing but the operation of physical law - cannot be regarded as unassailable [not possible to attack]. It is an *assumption* governing the scientific project rather than a well-confirmed hypothesis." (p. 11 italics mine) The reason for this dominance of the popular naturalistic interpretation of nature and life, he said, is that nobody can think of an alternative that does not involve God.

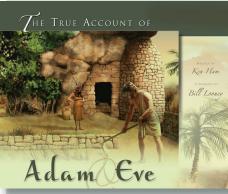
Although Dr. Nagel does not believe in God, he nevertheless declares that the mainstream approach to science must be wrong. The reason he says this is because matter and natural processes cannot explain consciousness. Thus he declares: "The existence of conscious minds and their access to the evident truths of ethics and mathematics are among the data that a theory of the world and our place in it has yet to explain." (p. 31) Since he rejects the supernatural, he hopes to find some kind of purpose in nature that could explain intention, values and mind without appeal to the work of God. One might suppose that his fellow philosophers would appreciate Dr. Nagel's objective.

The scientific community however cannot forgive an individual who writes of neo-Darwinism: "I find this view antecedently unbelievable - a heroic triumph of idealogical theory over common sense." (p. 128) In a parting shot, he further describes the neo-Darwinian interpretation not only as ``invalid`` or wrong, but also ``laughable``. He is quite sure that a new scientific interpretation will appear within a couple of generations, but it may be just as invalid. After all, when it comes to science, humans will believe almost anything, he suggests. (p. 128)

Thus Dr. Thomas Nagel has attracted a great deal of unflattering attention. His crime was to point out flaws in the current scientific orthodoxy. None of his colleagues can blame his religious views, his are the same as theirs. It is evident that independent thinking about origins is neither encouraged nor allowed among mainstream scientists. The majority allow a herd mentality to tell them how to think. We can discard the idea of scientific objectivity. Dr. Nagel's experience certainly tells us a lot about mainstream modern science.

Young and older, learning together

There are not many books written to appeal to, and to educate the whole family, from young children to adults. This however is one such book. The purpose of this publication is to instruct everyone about the past history of the world's first people, Adam and Eve. Each detail in the Genesis account is featured in a two page spread. The first page consists of a beautiful full colour illustration. Several of the nature and garden scenes place Adam (and later also Eve), in beautiful surroundings which include various animals including dinosaurs. The unwritten message is how wide was the variety of animals with which the first couple would have been familiar. Thus each brief text with the accompanying illustration, serves to focus discussion on the significance of one event. How was Adam able to name



the various creatures? What was the significance of the couple eating the forbidden fruit? What happened after the couple was forced from the garden?

The objective of this book is to provide a timely response to grow-

ing confusion among Christians concerning the early chapters of Genesis. Did the events as described really happen? This book allows the whole family to picture how these events transpired. A centrefold dramatically illustrates the contrast between the idyllic garden scene and the post-fall lifestyle. The scene changes to much drier conditions with less vegetation and greenery, with a pregnant Eve and with Adam toiling to maintain his crops. The contrast is a perfect focal point to discuss the appearance of death, disease and disasters in the new world order. The discussion continues however with the hope of the gospel message.

This book then is a charming addition to the education of the whole family, not least the young children. Adults can focus on the text, and youngsters can study the illustrations. Everybody learns at their own level. The attractive format of the book makes it a perfect gift for grandchildren, friends and family.

Ken Ham. 2012. *The True Account of Adam and Eve.* Master Books. Hardcover. Full colour. 50 pp.

Make the most of Creation Weekend 2013.

Continued from page 1

articles for the *Bible-Science Newsletter* (an early, well-known creationist publication).

Paul received his B.A in philosophy and evolutionary biology from University of Pittsburgh and his Ph.D. in philosophy of biology and evolutionary theory from the University of Chicago. He is currently a Fellow of the Discovery Institute (Seattle) and Adjunct Professor for graduate studies in science and religion at Biola University in southern California.

Even before he graduated, Paul Nelson became involved with the intelligent design community. He was an organizer of the first (founding) Mere Creation conference in 1996, where a number in this research community first recognized their common interests. In subsequent years, as the Intelligent Design community has become better known, Dr. Nelson has published book chapters in the anthologies *Mere Creation* (InterVarsity Press), *Signs of Intelligence* (Brazos), *Intelligent Design Creationism and its Critics* (MIT

Press), and Darwin, Design and Public Education (Michigan State University Press). His scholarly articles have appeared in Biology and Philosophy, Zygon, Rhetoric and Public Affairs, and Touchstone.

Better known, perhaps is the fact that Paul Nelson is a featured commentator in several Illustra Media films including Unlocking the Mystery of Life, and Metamorphosis (both best sellers for our association). Dr. Nelson continues to connect the creation model and intelligent design in lectures at such events as the upcoming International Conference on Creation-

ism in Pittsburgh in August 2013, and other conferences, for example, examining evidence concerning created kinds (baramins).

His research interests include the relationship between developmental biology and our knowledge of the history of life, the theory of intelligent design and the interaction of science and theology. He lectures frequently at colleges and universities in the United States as well as internationally, particularly Europe. He has spoken on American and Italian national radio, and written for popular publications such as Oslo Dagbadet and Christian Research Journal.

The lectures which Dr. Nelson is scheduled to provide , are the following:

Understanding Intelligent Design: According to its critics, intelligent design is simply creationism repackaged to avoid constitutional challenges in public school classrooms in the United States. This criticism however, ignores the real history of ID and its actual content. ID is not so much a theory about life's history – but a proposal that design is evident in many experimental and observational studies of nature, and therefore such design is a fit subject for scientific analysis. (Among



such examples of design we find information content and irreducible complexity.) In his talk, Dr. Nelson will explain what ID is, and what it is not.

Whatever Happened to Darwin's Tree of Life: This lecture addresses the recent collapse within evolutionary biology of the single Tree of Life hypothesis, this most famous evolutionary teaching of the 20th century, but now in tatters in the face of an ocean of genetic data which don't fit the tree idea. This lecture focuses on certain genes that are unique to single species, thus contradicting any ideas of an evolutionary connection. Dr. Nelson will discuss the implications of these findings for evolution and intelligent design.

Why Animals are Hard to Build: Biology textbooks typically display images of so called homologous features like bird wings, bat wings, front legs of four footed animals and human arms. The argument is that creatures with such features are variations on a common theme, all descended from a common ancestor which had a similar but simpler front limb. This lecture (abundantly illustrated with animations), explains that the particular process of development of each type of creature from fertilized egg to maturity, poses fundamental challenges to theories of undirected (Darwinian) evolution, but makes sense from the perspective of an intelligent designer.

Dr. Seuss' Biology: Analyzing the problem of evil in evolutionary reasoning: From Darwin's time and even before, to the present, a leading argument for naturalistic evolution has been the problem of evil. Surely, the argument goes, if

a wise Creator had built living things, these creatures would not display the odd solutions and design flaws (such as diseases) that we see. This talk critically analyzes such arguments, exposing their naïve theology and poor support from the evidence. In a humorous analogy, Dr. Nelson compares the situation to the fictitious Dr. Seuss' remark "If I ran the zoo..." [it would be different and better]. By implication,

mainstream scientists are saying that if God had made living things, they would be different and better than what we see. Dr. Nelson however demonstrates that Dr. Seuss' remark makes a great children's book – but valid science, not so much!

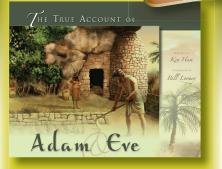
The venue for Creation Weekend is Mill Woods Assembly, 66 Street and 23 Avenue in Edmonton. The church is easy to find and the parking is excellent.

Be sure to reserve this weekend for these exciting sessions and do tell your friends about them too!!

Randy J. Guliuzza **Clearly Seen: Solid Arguments for Design**

The author demonstrates why the idea of design is so important to a Christian worldview. Evolutionists of course deny that anything was designed, because otherwise a designer would be required. The author uses engineering concepts and other arguments to show that the key features of organisms did not just appear, but they were carefully chosen to fill a need. Recommended for high school and adult readers.

Paper / full colour / 63 pages

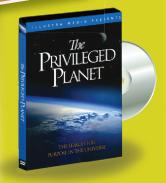


Ken Ham True Account of Adam and Eve

This book is a great addition to the education of the whole family. The objective of the book is to provide a timely response to growing confusion among Christians concerning the early chapters of Genesis. Adults can focus on the text, and youngsters can study the illustrations. The attractive format of the book makes it a perfect gift for grandchildren, friends and family.

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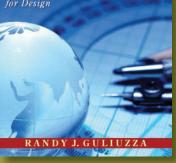
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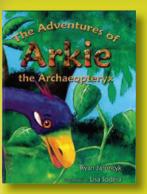
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Constructing Solid Argumen for Design





Ryan Jaroncyk Arkie the Arachaeopteryx

This beautifully illustrated story about extinct creatures known to us mainly from their fossils, is designed to teach an important lesson. Organisms that look different, often exhibit features in common with other better known animals groups. These unfamiliar creatures are not evolutionary links between groups as many popular books would declare. Suitable for young children.

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