So what could this fin walking be for? Numerous suggestions have been offered, such as giving them an advantage in catching their bottom-dwelling prey (crabs, snails, small fish)¹² and allowing for easier traversal of their 'structurally complex habitat': coral reefs.¹³ There is no need to suppose that they evolved to be like this. Rather, they are well designed to suit their specific environment, which is exactly what one would expect starting from the Bible.

Strolling to a solution

This 'walking' shark episode comes not long after the recently publicized *Tiktaalik* fossil was paraded in *Nature* as the 'missing link' of tetrapod evolution. However, even *Tiktaalik* fails to fill the crucial gap between sea and land locomotion. The conclusions of Azizi and Horton on the differences between aquatic 'walking' in sharks like *Hemiscyllium* and terrestrial locomotion should be well noted:

'The functionality of relatively small and unimpressive locomotor structures used during aquatic walking highlights important differences in the mechanical demands on limbs and fins in aquatic versus terrestrial environment.' 16

Evolution is not needed to explain the existence of this rather peculiar shark, and it adds nothing to our understanding of this shark's biology. Nor does the observation of such underwater 'walking' provide any evidence for fish-to-tetrapod evolution. Even octopuses have been observed 'walking' on two of their 'legs', but this is hardly the precursor of bipedalism on land! Rather, the Word of God provides a sound basis from which to understand more of the epaulette shark's design features, which testify to the intelligence and creativity of the God of the Bible.

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Controversial claim for earliest life on Earth

Tas Walker

Researchers claim to have found 'compelling' new evidence for the 'earliest' forms of life on Earth. Australian and Canadian scientists describe, in a paper in *Nature*, 1 seven varieties of stromatolites along a 10-km strike of a rock formation in the Pilbara region of Western Australia (figure 1). Known as Strelley Pool Chert, the formation is supposedly 3.43 billion years old.

Stromatolites: fossils or formations?

There has been an ongoing controversy about the origin of the Pilbara stromatolites. If, as many have argued, their finely laminated sedimentary structures (figure 2) are the result of non-living chemical processes, then there is nothing particularly remarkable about the find.

But lead author Abigail Allwood, from Sydney's Macquarie University, says that the stromatolites formed a 'reef' and that the reef was built by microbial organisms.²

This makes the find highly significant—like finding the 'Holy Grail'³—as she describes it. At an age of 3.43 Ga, the stromatolites would represent evidence for some of the oldest life forms on Earth.

'We're seeing evidence not just of life's existence,' Allwood said, 'but that it was probably well established and already biodiverse, which suggests it could have emerged much earlier in Earth's history.'

So why did the team claim that the laminated sedimentary structures were biogenetic stromatolites? Because they say they are similar to younger stromatolites that have been described by others, and because they say that abiotic processes capable of producing such laminated structures are 'unknown and unlikely in the natural world'.

However, even within their

interpretive framework, the Archaean was a most unnatural period of geological history compared with today. There was no multicellular life, and there was supposed to be a reducing atmosphere of methane and ammonia. And chert horizons, although common in the geologic record, are not known to be forming now.

The incredibly old dates assigned to the rocks create some peculiar consequences, too. Although the Strelly Pool Chert formation varies from only 23–102 m in thickness (figure 3), it occupies a time period of at least 80 million years.⁴ 80 million years is a long

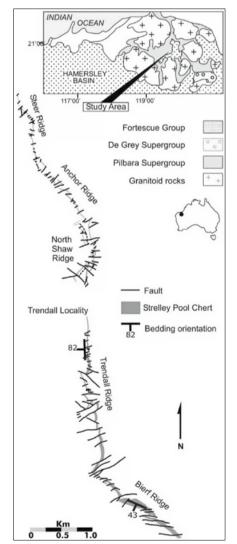


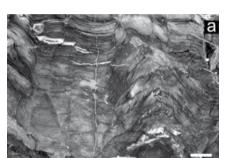
Figure 1. Location of Strelley Pool Chert outcrop which contained the 'stromatolites' at the focus of the claimed earliest life. The insert at top shows the geological structure of the northern Pilbara Craton. (From Allwood et al.⁴).

time for the deposition of only 20 m of sediment. What else happened during this immense period of time?

Rocky road for ancient dates

And it is even more curious when we consider the rocks themselves. The basal member of the formation is a boulder conglomerate (figure 3), deposited rapidly. It contains soft clasts (pieces) of mudstone derived from the underlying formation, evidence that not much time elapsed between the two.

The underlying and overlying formations were deposited from volcanic eruptions (figure 3). How could



microbes build these 'reefs' amid volcanic eruptions, rapid sedimentation and geological catastrophe? Perhaps soft-sediment deformation rather than bacteria may explain some of the unusual shapes of the laminations.

But, even if we accept the billions of years and the evolutionary scenario, was there enough time for life to have formed so quickly after the Earth's formation? If this new discovery finds acceptance, theories about the origin of life will probably need revision. Or perhaps the age of the earth will need to be extended.

With such big implications, some

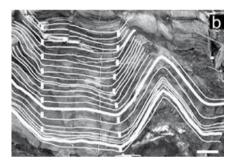


Figure 2. An example of the sedimentary laminations that were interpreted as Large Complex Cone (LCC) stromatolites. a) Two cones in outcrop, b) Same image with traced laminae. (From Allwood et al.4).

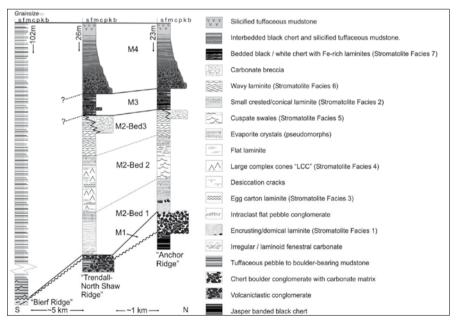


Figure 3. Stratigraphic sections of the southern, central and northern portions of the study area. Grainsize scale: s = silt-sand, f = fine sand, m = medium sand, c = coarse sand, p = pebble, k = cobble, b = boulder. (From Allwood *et al.*⁴). Evidence of large scale catastrophe includes the conglomerates and volcanic deposits. Features labelled as laminites, dessication cracks and evaporates are routinely interpreted as forming over a long period of time, but they can be re-interpreted within a catastrophic model.⁷

remain unconvinced of the claims.

Martin Brasier is one who has long argued *against* the idea that the stromatolites are of biogenetic origin and that they are more likely chemical precipitates. Professor of paleobiology at the University of Oxford, he is reported to have said 'Much caution is needed when making claims about the earliest signs of life. In rocks of this great age we must assume the hypothesis of a non-biological origin.'2

Note that it's not because of the *evidence* that he rules out a biological origin, but the *assumed* 'great age'—i.e. the rocks are presumed to be older than life itself, therefore any evidence to the contrary is automatically dismissed.

From a biblical perspective, it is inconceivable that volcanoes would be active during Creation Week, depositing volcaniclastics and tuff such as comprise parts of the stratigraphic sections (figure 3). These sections show abundant signs of catastrophe that point to large-scale watery and volcanic processes, so it is doubtful the material was deposited in the pre-Flood era.

Rather, the sediments were likely laid down during the early phase of the global Flood. It is possible that reefs which grew during the pre-Flood era were uprooted and redeposited, but it is more likely that the stromatolite structures are not of biogenic origin.

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'Not to be used again': homologous structures and the presumption of originality as a critical value

James Patrick Holding

One of the most common arguments used by evolutionists as a 'proof' of naturalistic evolution points to the existence of homologous structures among different animal types. This argument also manifests as an argument against special creation and/or intelligent design. The following paragraph from a popular source online sums up the matter succinctly:

'Homologous structures are body parts with similar arrangements derived from a common ancestor but used for different functions. The human arm, the horse's forelimb, the whale's flipper, and the dog's front paw are all homologous structures which make use of the same basic bones and muscles. Why would an infinitely powerful designer choose to repeat the same design over and over in his creations? Why, in his infinite wisdom, could he not use a radically different design for each of his supposedly independent creations?'

It will not be our purpose here to discuss the scientific merits of the argument concerning homologous structures. Rather, we will be defending and expanding upon a prior creationist defence made against this argument on strictly logical and philosophical grounds.

Elsewhere it has been capably pointed out that the argument from homologous structures commits a serious logical fallacy: We can apply this analysis to a major evolutionary argument:

- 1. If organisms X and Y have a common ancestor, they will have homologous structures;
- 2. X and Y have homologous structures;
- 3. Therefore X and Y have a common ancestor

This demonstrates that it is an example of the fallacy of affirming the consequent. The conclusion is not proven—the homologous structures could be due to a common designer, leaving a 'biotic message' that there is a single designer of life rather than many.³

This argument may in fact be strengthened and reaffirmed through the understanding that the argument from homologous structures hides an unsubstantiated presumption. That is, that originality is a critical value which God would be compelled to follow. However, this presumption is the result of modern biases interpreting the biological evidence, while, indeed, the suggestion of a 'biotic message' is quite accurate. Homologous structures, far from pointing away from a designer of infinite wisdom, would have indicated to readers of the Bible in their time a designer who did indeed possess infinite wisdom and mastery over His creation. It is only because modern persons have arbitrarily decided that a certain degree of what they see as 'originality' is a proper means value that the evolutionists' argument carries any apparent force.

Something old, nothing new

To frame our argument against the evolutionists' misuse of homologous structures requires us to have an understanding of certain values critical to ancient persons. Roman literature of the New Testament period tells us, 'The primary test of truth in religious matters was custom and tradition, the practices of the ancients.' In other words, old was good, and innovation was bad. Change or novelty was 'a means value which serves to innovate or subvert core and secondary values.'

By itself, this demolishes one part