

Contentious fossils

A review of
***Bone of Contention: Is
 Evolution True?***
 Third edition
 by Sylvia Baker
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 tion Society, UK, 2003

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This new-look edition of a popular and helpful booklet is described as containing new material throughout its pages. With the exception of one illustration of corals, which appeared on page 31 of the previous edition (published by *AiG*), all the illustrations from that edition are reproduced here, and mostly in the same place in the text, giving the superficial appearance that very little has changed.

However, there are indeed a number of changes when one actually reads the text. This review will largely concentrate on certain alterations and additions to this new edition.

1. How evolution took over

This chapter gives an historical overview of evolutionary ideas and how they came to be the prevailing paradigm for understanding Earth history and origins. Little new material appears in this section. However, under her discussion of the nature of a Genesis ‘kind’, the author points out that although Linnaeus was a key proponent of the fixity of species, he later modified his view. This is a noteworthy observation to make about a man who is sometimes maligned for his belief in species immutability, in spite of his impressive contribution to biological nomenclature and classification. This point is also highlighted in another recent book that critiques evolution—the author stated that Linnaeus’ observations of hybrids caused him to come to see contemporary spe-

cies as the result of degradation and/or cross-breeding.¹

2. Just what do the fossils prove?

The three evolution-inspired expectations of the fossil record, listed in the previous edition, have now been reduced to just two. The following statement has been dropped:

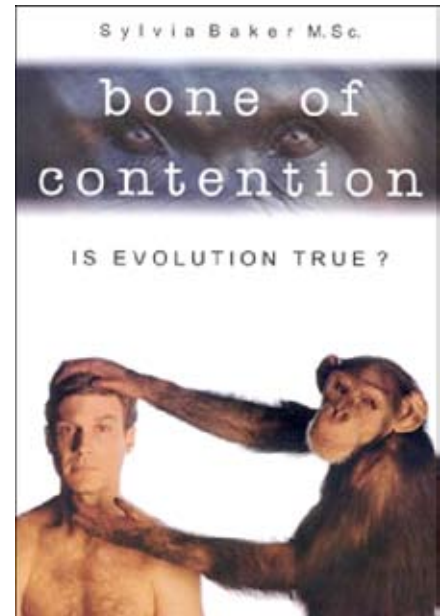
‘c. We should, of course, expect to find the rock strata themselves in the order given by the geological column, with the oldest at or near the bottom, and the most recent at the top.’²

Perhaps this is to diffuse potential criticism that creationist arguments about ‘out-of-place’ fossils represent a ‘straw man’ perspective of the rocks, not held by paleontologists. Alternatively, it could represent an acknowledgement that the stratigraphic principle of superposition does not always apply, at least on small scales. The previous mention of ‘a water or water-vapour canopy’ has been toned down to ‘This may mean that there was originally more water in the upper atmosphere than there is now’ (p. 9)—presumably due to the fact that this model for the ‘waters above’ is not currently popular among today’s creationist community.

There is a very pertinent insertion about the nature of the Genesis Flood, which shows the unmistakable influence of advocates of a low Flood/post-Flood boundary in the geologic column:

‘All air-breathing creatures were “wiped out”. The word means more than simply that they died. It could mean that they were totally erased from the earth. It was as though the surface of the earth [i.e. “land”] experienced a “meltdown” and the only safe place to be was in the water, where God was protecting Noah, his family and the other creatures that were in the ark’ (p. 9).

For instance, this was the position



espoused by Steven Robinson in a symposium in this Journal in 1996,³ but which (in my view) has been soundly refuted since, again in this journal.⁴ To be fair, Baker does not insist that the word—*machah* in the Hebrew—must mean ‘blot out, without trace’. However, her wording does quite strongly imply this. Of course, if true, fossils would then not be evidence of the Flood but of more localized, post-Flood catastrophes. And here, unsurprisingly, is where we see a major departure from the text of earlier editions. Where once there were five predictions about what the fossil record would show, there are now just two. For example, gone is the following prediction:

‘It should certainly show the remains of animals killed in the Flood. If such vast numbers of living creatures were wiped out suddenly they should have left evidence in the form of huge numbers of skeletons bearing the marks of violent death.’⁵

Instead we read:

‘It would not surprise us if the rocks contained evidence of catastrophic death. This could *possibly* result from the year of the Flood itself, *although the devastation caused may have been too great to leave fossils*’ [emphasis added] (p. 10).

But surely this wording has the potential to confuse readers into thinking that God's great Flood judgement for sin left no evidence; i.e. no fossils (Genesis 6:7, 14, 17). Throughout Scripture, death is seen to be the consequence of human rebellion against the Creator. Fossils (which speak so powerfully of death) are surely both the primary prediction and expectation of a cataclysm on the scale of Noah's Flood. Contrary to the author's statement above, it *should* surprise us if the rocks did *not* contain evidence of catastrophic death.

Paradoxically, the author has not significantly altered a statement that appears later in this chapter and which seems to be at odds with her earlier statement that the Hebrew word 'could mean that they were totally erased from the earth' (p. 9):

'Is there any evidence in the fossil record of ... a worldwide devastating flood?

Yes, there is ... In the earth's rocks are to be found millions upon millions of fossilised animal remains, often grouped together in what appears to be huge "graveyards". There are also to be found unimaginably vast deposits of coal and oil, both of which are the remains of living organisms' (p. 11).

Similarly, she has left the following concluding statement about fossil graveyards:

'Uniformitarianism can neither explain why so many thousands of animals died violently at the same time, nor why, having died, they were buried so rapidly in sediment. Catastrophes like the biblical Flood can' (p. 11).

One cannot have it both ways. Either the fossil record is testimony to the Flood (with the corollary that the uniformitarian framework is false) or it is not—in which case the Flood has nothing to say about the fossils!

The section subtitled 'Gradual development' has been substantially modified. Particularly noticeable is the complete removal of the paragraph about the horse evolution series. This is intriguing because one still comes

across this evolutionary argument quite frequently, albeit more usually presented as an adaptive radiation ('bush') rather than the more traditional, 'linear' view. However, these 'old chestnuts' die hard and one UK high school book from 2002 still presented the linear, *Eohippus-to-Equus* picture that was discredited decades ago. In addition, I recently lectured to veterinary students, at a major UK institution, who were still being taught these ideas.

Sub-sections on coal and oil, polystrate fossils, and 'Frozen animals of Siberia' seem little changed, as does the whole section subtitled 'Fossil links?' However, the discussion of apemen has an additional paragraph alerting the reader to two creationist books: Marvin Lubenow's book, *Bones of Contention*,⁶ and Reinhard Junker's *Is Man Descended from Adam?*⁷ But it is unfortunate to read:

'Dubois, the man who discovered [Java man] ... announced at the end of his life that they were not the remains of an ape-man at all, but rather that the skull belonged to a giant gibbon' (p. 14).

This represents a misreading of Dubois, as the late evolutionist, Stephen Jay Gould showed,⁸ but is an idea which is prevalent among evolutionists as well as creationists.

The section on 'Giantism' has been greatly reduced. The deleted text emphasised gigantism in pre-Flood creatures, linked to the water-vapour canopy idea.

Under 'The problem of extinction' the author again shows a leaning towards the obliteration of animals by the Flood. Instead of her original wording,

'It was as a result of the Flood, which killed every air-breathing land animal except those in the ark,'⁹

the text now reads:

'It *could have been* as a result of catastrophe linked to the Flood' (p. 15) [emphasis added].

Yet, this subtle alteration seems to conflict with the author's earlier statement that attributed fossil graveyards to the Flood! Those

creationists who are tempted to move towards a Flood that left no trace of pre-Flood creatures (i.e. no fossils) should consider the implication: one is left defending a world-wide Flood that left no fossil evidence! There is the added burden of having to then explain how huge depths of sedimentary rocks, with their entombed fossils, came to be laid down in the approximately 4,500 years *since* the Flood; i.e. by local, regional (and in some cases, nearly continental) catastrophes about which both Scripture and contemporary geology are silent. The result of such reasoning is that advocates of these ideas must extend the post-Flood period beyond that which is plainly indicated in Scripture. Attempts to introduce extra time into the biblical chronologies are the inevitable consequence.

The chapter-end notes, about continental drift and plate tectonics, have been removed from this new edition, perhaps reflecting that this is a hotly debated topic among biblical creationists.

3. Genetics and God's natural selection

The author has updated the text to allow for the recent exposé that peppered moths do not rest on tree trunks in the wild and that the photographs suggesting they to were staged. She concludes:

'Nevertheless, as a story, it does illustrate, in principle, the idea of natural selection' (p. 18).

Also, in her subsequent discussion of mutations, where she once had,

'[Geneticists] ... have not been able to come up with one convincing case of a mutation that was clearly beneficial to the organism,'¹⁰

the new edition removes this error (there are obvious instances in which a loss can be a survival advantage—e.g. the loss of wings in beetles on windy islands):

'[Geneticists] ... have not been able to come up with one convincing case of a mutation that "added



The theory that the Flood of Noah extinguished all trace of life on Earth runs into problems when it encounters the millions of fossils found in rock layers around the world. Large post-Flood catastrophes must be invoked to explain the geological and fossil record.

complexity” (p. 19).

Unfortunately, she has not modified the following,

‘I am not alone in believing that *even if* beneficial mutations could occur, they would not be adequate to explain evolution’ [emphasis added] (p. 19),

which could give the impression that beneficial mutations don’t occur—undoubtedly *not* the intention of the author.¹¹ Obviously, her main point about their inadequacy to explain evolution still stands.

The remainder of this chapter deals with homology and its relation to genetics, then natural selection; it seems little changed. However, there is an additional note (p. 21) which talks about the rise of the Intelligent Design movement, with special mention of Phillip Johnson and Michael Behe as key figures. There is a brief mention

of the Human Genome Project and the comment is made that,

‘... we understand much less than we thought we did about how genes function’ (p. 21).

The further reading list particularly highlights Jonathan Wells’ book, *Icons of Evolution*, published in 2000, as a ‘very important book’. This book has been thoroughly reviewed in *TJ*.¹²

4. How young is the Earth?

The statement in the previous edition, concerning “‘controversy’ ... about the true length of the half-life’ of some radioactive elements, has been removed. However, several new paragraphs appear on page 25. These deal with the underlying assumptions that underpin all radioactive dating methods, discuss isochrons as one

means of trying to reduce the amount of guesswork, and refer to the work of the RATE group (Radioisotopes and the Age of The Earth), a consortium of creationist researchers who are doing much original work in this area.¹³

The examples of age-indicators that refute the conventional 4.5 billion year age of our planet have been reduced to just two: 1) Atmospheric helium, and 2) Salt in the sea. The maximum age of Earth, based on helium production was quoted as 26 million years in the second edition, but has been modified to 1.76 million years here (p. 25), with a reference to the work of creationist Larry Vardiman. The section on meteoritic moon dust has been omitted as this is no longer a sound argument.¹⁴ More puzzling is the complete omission of the paragraph on the decaying magnetic field of the Earth. This less-known fact has been used by creationists, since the 1970s, to argue that the Earth must be less than 10,000 years old. The original argument by Barnes was countered using the evidence of magnetic field reversals, which has been convincingly incorporated into the refinement of the Barnes model by physicist Russell Humphreys. As reported recently,

‘There is strong evidence that the field is decreasing by about 5% per century.’¹⁵

The section entitled ‘How long has life existed on earth?’ contains several changes. The part that deals with carbon-14 dating has been modified by removing paragraphs that dealt with the implications of a water vapour-canopy and a stronger magnetic field in the past. Again, for reasons given above, it seems somewhat premature to shy away from the latter. A stronger magnetic field would correlate with less cosmic ray bombardment of the upper atmosphere and less carbon-14 production—helping to explain why Carbon-14 dates are often larger than expected from a tight chronological view of the Genesis narrative. The author has included an additional helpful argument for recent creation:

‘If human history is really so long as evolutionists believe ... Where

are the graves of all the humans who are supposed to have died over hundreds of thousands of years?’

She goes on to point out that the notion of such long ages of stone tool use, without much progress, makes little sense.

In the ‘Additional notes’ section of this chapter (p. 28), the author discusses the second law of thermodynamics and its relevance to evolutionary theory; minor modifications have strengthened this part. She then discusses ‘The age of the stars’ and has modified this section to allow for creationist proposals that aim to deal with the ‘problem’ of distant starlight (i.e. billions of light years) in a young universe. She mentions the controversial idea that the speed of light was greater in the past, adding that a recent physics paper ‘suggested something similar’ (though significantly different). However, rather bizarrely, she makes no mention whatsoever of the much-discussed cosmology of Russell Humphreys—the subject of a book and numerous creationist papers and correspondence (many in the *TJ*) over recent years.

5. The true history of man

In keeping with changes elsewhere in this edition, discussion of a water-vapour canopy has been removed from the section on ‘The creation week’. Reference to a ‘universally warm subtropical climate’ before the Flood, has also been removed, together with discussion of fossils and coal which furnish evidence that is consistent with this hypothesis. Since some advocates of the ‘European Flood Model’ prefer a post-Flood explanation for much of the coal—and the author appears sympathetic to that approach—this is not surprising. Gone too, is a paragraph that dealt with changing sea level, submarine canyons and drowned valleys.

The section entitled ‘The Flood and its immediate aftermath’ (formerly ‘The year of the Flood’) has been substantially altered. For instance, there is now a greater emphasis on various

specifics of the biblical record.

The former statement about human life-spans dropping ten-fold following the Flood, has been added to:

‘Genesis chapter 6 verse 3 makes it plain that this was a deliberate plan of the Lord—to reduce the life span to a maximum of 120 years. He was not prepared to allow people a longer life span in which to defy him and live godless lives. It is interesting that 120 years is now regarded as the natural maximum life span for humans’ (p. 31).

Whilst the last sentence is acknowledged,¹⁶ it is a moot point, whether Genesis 6:3 actually refers to an intended maximal human age. For many generations following the Flood, Scripture records ages which greatly exceed 120 years. For example, Isaac died at the age of 180 years, just five years older than Abraham and twenty-five years younger than his grandfather Terah. It is more likely that the 120 years limit refers to the period between God speaking to Noah (of his intention to destroy the Earth) and the onset of the Flood itself—time for the building of the Ark as well as a period of grace during which Noah faithfully preached to the rebellious antediluvian people (2 Peter 2:5).

The scientific evidences for the historical occurrence of a global Flood have been modified. Polystrate fossil animals and trees are still listed as evidence of this ‘great catastrophe’, the earlier statements of the book notwithstanding. However, the introductory sentence to the section on coal has been changed from,

‘The study of coal provides evidence of a flood,’¹⁷

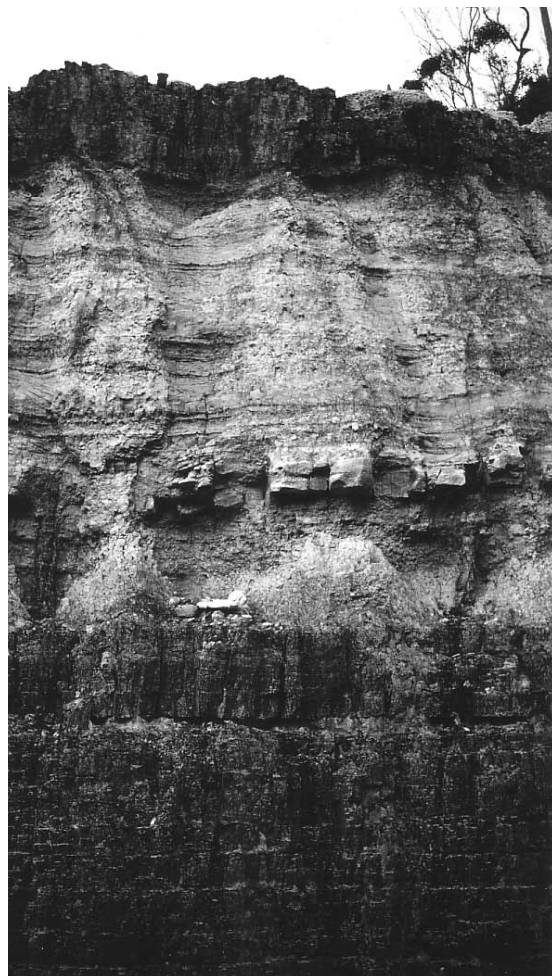


Photo by Andrew A. Snelling

The physical attributes of coal seams around the world (polystrate burials, plants buried without root systems, etc.) speak of the rapid burial of large floating mats of vegetation, and not the slow and gradual accumulation of peat matter.

to read,

‘The study of coal provides evidence of flood *conditions*’ [emphasis added] (p. 33).

This is presumably because the author wants to allow for the post-Flood formation of coal. In addition, the former reference to human artefacts (such as a gold chain) in coal has been dropped—a wise decision, considering the fact that such reports—fascinating though they are—are usually impossible to verify.

Bearing in mind what has been said about the ‘wipe out’ theory concerning the creatures doomed by the Flood, it is again rather surprising (and confusing) to read:

‘The fossil record is of special importance when considering evi-

dence for the Flood' (p. 33).

Furthermore, Baker writes: 'The wiping out of the dinosaurs and the many fossilised shoals of fish that obviously died suddenly are all factors pointing to a terrible catastrophe such as the Flood would have been' (p. 33).

Whilst I agree wholeheartedly with the above statements, advocates of the 'European Flood Model'—i.e. a pre-Mesozoic Flood / post-Flood boundary—are unanimous in insisting that dinosaur remains are *not* the result of Noah's Flood, but succumbed in later geologic episodes. Baker seems caught between two opinions; i.e. wanting to show solidarity with many European creationist geologists but reluctant to let go of fossils as evidence of the Flood! For instance, one paragraph later she writes,

'However, not all of the fossil evidence depicts a catastrophic scenario. For example ... dinosaur footprints, showing that the dinosaurs were ambling along in a normal kind of way in a gentle environment ... Dinosaur [sic] nests have been found neatly arranged, showing that something approaching normal life was going on' (p. 33).

One cannot have it both ways. Are dinosaur remains evidence of Noah's Flood or not?

Moving on, it is good to see that the 'fastest-animals-are-buried-higher' idea—put forward to explain the general sequence of fossils observed in the sedimentary rocks—has been abandoned. However, there is no mention of the prevalent creationist theory that the fossil succession largely reflects the burial of distinctive ecological zones—areas of the pre-Flood world where groups of diverse organisms lived together, as they do today. Instead we read:

'... it could *equally well* reflect the order in which the earth was repopulated after the Flood' [emphasis added] (p. 34),

which reveals the influence of the European Flood Model yet again. Whilst it can be admitted that both approaches

to Flood geology are potentially valid ways of seeking to understand the Earth's geology in light of Scripture, it is surely debatable whether these *equally well* explain the geologic evidence. Either the Flood left little evidence, in terms of fossils, or it left abundant evidence, to be seen on every continent. Both cannot be correct—indeed, one of these ideas is fundamentally in error! This stubborn *fact* should not, of course, be understood to disallow friendly working relations between geologists and others in the creationist community, who together seek to harmonise the geological evidence with God's unalterable Word.

In the final section, 'From the Flood to the present', the author notes that, in spite of the scientific evidence actually supporting the Bible, most scientists still reject, or even mock, its history. She has added the following very important observation:

'It is important to realise that no scientist operates from a neutral or objective philosophical position' (p. 34).

In summary, Sylvia Baker's booklet retains the arguments that made earlier editions so popular among interested laypeople and contains welcome updates and revisions to reflect the advancement of creationist knowledge. However, the change in stance over the significance of fossils, coupled with apparent (and repeated) inconsistency over their presentation as evidence for Noah's Flood, has the ready potential to cause confusion. This is regrettable and reduces the booklet's usefulness as a helpful introduction to the Creation/evolution issue.

References

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Erratum:

In the article 'Protein mutational context dependence: a challenge to neo-Darwinian theory: part 1', (*TJ* 17(1):117–127, 2003) the following footnote is missing in Table 6:

[13] The (12,036/32,768) x 27 codons can only create one unique sequence: LLL.