

Special Symposium

Where should we place the Flood/ post-Flood Boundary in the Geological Record?

Controversy is not new, especially for creationist geologists. However, for many years now, a sharp division of opinion **within** our own ranks on matters fundamental to Flood geology has been developing — where should we place the Flood/post-Flood boundary in the geological record? This plight can no longer be ignored, as it threatens our movement's unity and gives to our detractors ammunition to use against us. We must put our house in order!

With this objective in mind, I took the unprecedented step of inviting my colleagues in England and Germany to compile a set of papers to present the evidence supporting their case that the Flood/post-Flood boundary is within the Carboniferous strata, so that the ever-popular Mesozoic dinosaur fossils would be the remains of descendants of dinosaurs that were on the Ark and the strata containing the dinosaur fossils would be post-Flood. This is no small difference from the view espoused by most creationists in North America and Australia, that the dinosaur fossils are the remains of pre-Flood animals buried in Flood strata, with the Flood/post-Flood boundary coming not only after the Mesozoic strata but just before the Ice Age strata of the Pleistocene. This latter perspective has been the 'traditional' view, because of its popularisation for over 30 years, and is defended here in one invited paper from a US colleague.

Let it be said without fear of contradiction that **all** of our contributors to this special symposium are staunch Bible-believing defenders of a literal Genesis, a six 24-hour-day Creation, a young Earth and universe, and a global Flood. Yet the differences of opinion centre initially on our only guaranteed source of information on earth history — the Scriptures!

For example, where and what were the 'fountains of the great deep'? Some, including our European contributors, believe that they were terrestrial springs; others believe that they were submarine vents like those which exist today at mid-ocean ridges, but which during the Flood erupted on a cataclysmic scale due to the upwelling of magmas to the ocean floor. This is hardly an insignificant matter, for it affects one's conception of what happened at the beginning

of the Flood and one's expectations of what to look for when identifying that beginning in the geological record.

Furthermore, how quickly were all the land-dwelling, air-breathing animals destroyed from off the face of the Earth (Genesis 6:13,21-23)? The interpretation preferred by the English contributors is that the Flood which destroyed the Earth itself (Genesis 6:13) was so catastrophic in its beginning that within 24 hours all the fountains of the deep had erupted, and within 40 days every part of the Earth was under water. Consequently, they suggest, all flesh that moved upon the Earth perished almost instantly and was blotted out without trace, and almost all fossils of land-dwelling animals are the remains of post-Flood animals. On the other hand, in the 'traditional' view, although most would agree that all pre-Flood mountains were submerged within the first 40 days, the fossils of land-dwelling animals buried before the Tertiary, and possibly also before the Pleistocene, are seen as the remains of animals wiped out during the Flood. No one denies the catastrophic nature of the Flood, but according to our US contributor, who assumes that the Flood began with deposition of the Cambrian, the placing of the Flood/post-Flood boundary in the Carboniferous potentially leaves more sediments to be deposited after the Flood than during it, and coupled with a higher incidence of explosive volcanism (for example, continental flood basalts in the Mesozoic and Tertiary) implies that conditions may have been more catastrophic in the post-Flood era than in the Flood itself.

Now it is clear that all participants in this debate are reasoning **from** the Scriptures **to** the scientific evidence — the absolutely imperative approach — because the scientific evidence in question comes from the past largely unobserved by man and its interpretation is subject to human fallibility, whereas the biblical record is an eyewitness account guaranteed by God's omnipresence, omnipotence, omniscience, and absolute truthfulness and holiness. Furthermore, our contributors have approached the geological record, as systematised in the geological column, as a reality that needs to be reckoned with and understood

within the biblical framework of earth history, rather than as a formidable enemy that has been fabricated and so now needs to be attacked, dismantled and rebuilt. Yet if ever there was a battleground amongst creationists it is this one — is the geological column real or illusory? The advance of our efforts to build a comprehensive creationist model of earth history will always be dogged and halted by this controversy in which fundamental aspects of the geological data themselves are not agreed upon. No wonder our explanations are not taken seriously by the conventional geological community.

Fundamental to this question of the geological column's existence is the underlying issue of whether the fossil succession — and in particular the narrow stratigraphic ranges of the fossils (the restricted thicknesses of strata they are found in) which are used, along with other methods, to assign relative ages to rocks and correlate strata from region to region and continent to continent — is supported by a great body of evidence that is independent of evolution, or is an artefact of that theory. If we are to be honest with the geological data, with the actual rock strata that can be observed, measured and traced for kilometre after kilometre, we do find successions of strata (including fossil-bearing layers) that exactly correspond to the geological column. Garton is absolutely correct when he points to the succession of strata across England and from the Grand Canyon across into Colorado as verifying the reality of the geological column and fossil succession. Yes, there are sometimes suspected anomalies and occasional doubts raised about where some strata in some areas fit into the overall scheme of the geological column, but these instances are of only minor import compared to the overwhelming concordances worldwide. It is therefore recognised that the fossil succession and the geological column are integrally linked and inseparable. Surely then our quarrel with evolutionary/uniformitarian geologists should not be over the existence of the geological column's strata and fossil succession, but over the **rate** at which the strata in the column formed and over the interpretation placed upon the fossil succession.

So where should we place the Flood/post-Flood boundary in the geological record? The contributors to this symposium have put forward some convincing arguments in the following pages to support the answers presented. However, without wishing to state the obvious, their answers cannot both be correct! Robinson's question — can Flood geology explain the fossil record? — is the crux of the controversy. Why? Because the question of where one puts the Flood/post-Flood boundary is really a question of how one explains the order of the fossils. Robinson points out that a fundamental problem which faces anyone who would relate the Phanerozoic record to the Genesis account is that the earliest fossils in the Phanerozoic are marine invertebrate fossils, whereas the Flood deluged the dry land. Why, then, do terrestrial fossils not occur beneath marine fossils? The extremely extensive distribution of Lower Palaeozoic marine strata in the middle of today's continents undoubtedly

confirms the Genesis Flood, but if the geological record indicates that a worldwide transgression overwhelmed possibly all land surfaces in the Cambro-Ordovician, why are there no terrestrial fossils until much later in the Palaeozoic halfway up the macrofossil record? In this and other ways Robinson explains his dissatisfaction with the 'traditional' view of animals fleeing to higher ground, differing degrees of mobility and different ecological zones as the explanation for this undisputed order in the fossil record.

What can we also learn from the massive, apparently subaerial, outpourings of basalt lavas in the Mesozoic and Tertiary? Garner points out that these are clear evidence of the widespread presence of dry land and thus the post-Flood land surface. Garner and Garton also point to the patterns of occurrence of fossilised dinosaur nests and fossilised footprints respectively as corroborating their view that the Mesozoic and Tertiary strata were deposited in the post-Flood era, these animals needing dry land on which to nest and to walk. Similarly, Tyler argues that the chalk beds were deposited over a number of years rather than days or weeks, so such deposition must have been post-Flood when more time was available than during the Flood, thereby making these Cretaceous strata post-Flood. Furthermore, in Scheven's view the coal beds were formed as huge pre-Flood floating forest mats were being beached on emergent land surfaces towards the end of the Flood, making the Permian onwards post-Flood.

These are not evidences easily dismissed, yet Holt challenges their collective force with a set of his own evidences backed by quantitative data. Tabulating the volumes of Phanerozoic sedimentary rocks, Holt argues that placement of the Flood/post-Flood boundary at the end of the Palaeozoic would apparently require post-Flood upheavals, erosion and deposition of staggering proportions that approach those of the Flood. Similarly, he looks at the impact of volcanic activity on climate and shows that if the quantity of volcanics in the Mesozoic and Tertiary, including the continental flood basalts, was erupted in the post-Flood era (as suggested by Garner), then the dust and aerosols also produced would have devastated the climate and threatened survival of man and beasts, crops and forests. Holt also points to the fact that all the possible candidates for the Mountains of Ararat upon which the Ark landed at the end of the Flood are of Tertiary 'age', while the Plain of Shinar to which Noah and his family descended was not dry ground until after the Early Pliocene, arguing that the post-Flood era could not have begun before then. In any case, the geologic data pertaining to ancient sea levels point to two major global inundation peaks centred on the Ordovician and Cretaceous, so God's promise to Noah never again to destroy the Earth by water would have been broken, in Holt's opinion, if Noah disembarked at the end of the Palaeozoic. He also tabulates the quantity data on the distribution of fossil fuels (coal, oil, gas, etc.) through the geological column and concludes that the massive deposits of the Mesozoic

and Tertiary contain more organic carbon than could be produced and accumulated in the post-Flood era (including the Ice Age), quite apart from considering the catastrophic regional and continental flooding required to bury that quantity of vegetation.

So can we resolve this impasse? Some readers of the following papers may feel disillusioned at there appearing to be no conclusive answer to where the Flood/post-Flood boundary should be placed, but it is to be hoped that the publication of this collection of papers is the first step on the way towards agreement. Without the public airing of these conflicting evidences, the main players in the debate may have not been easily persuaded to begin dialogue and resolve this impasse. The topic is thus sure to reappear occasionally in the pages of this journal for some issues to come, as different researchers write to counter evidences and attempt to find consensus. Resolution of conflicting evidences and viewpoints is a healthy ongoing process that has always been the hallmark of good science. Another step forward will be taken in August this year, when ten of us will sit down together in conference for candid discussions and spend time on some of the actual outcrops (the raw data) at issue. Though the way ahead will undoubtedly be difficult and at times painful, I am myself confident that as together we pray and seek the Lord, the Creator Himself will guide us by His Spirit of truth towards eventual consensus.

Some may want to ask my own opinion on the matter; it should already be obvious that as one involved in the discussions, and specifically singled out by two of the English authors, I am no innocent bystander. Even though I do have an opinion, I genuinely remain open to persuasion while the conflicting evidence is yet to be resolved. In the first instance I am forced to go back to the Scriptures, to search them again more diligently and rigorously, so as to understand the biblical framework of earth history better and to discern all those little extra details supplied by closer inspection of the Hebrew. But I cannot easily overlook the global nature and import of Holt's arguments for a late placement of the Flood/post-Flood boundary, nor forget the obvious local geological context into which Noah landed at the beginning of the post-Flood era.

On the other hand, I cannot overlook Robinson *et al*'s many telling evidences, because that would be like the proverbial ostrich. What I and my co-workers have to do if the 'traditional' model is to prevail is to find other ways in which their evidences can be satisfactorily explained and accommodated within that Flood model which has in it a late(r) placement of the Flood/post-Flood boundary. Those who have seen earlier issues of this journal will know that I have already attempted to deal in this way with the problem of the chalk beds, but thus far not to Tyler's satisfaction. More serious is the evidence that the land was substantially submerged by the Ordovician, as pointed out by Robinson and recognised by Holt. Only marine fossils are found in those strata, while the terrestrial fossils (and the footprints and nests) come only at the end of the Palaeozoic record

and in higher strata. How, then, could those terrestrial animals have survived the Ordovician inundation to be **only** entombed higher in the record/succession? You can be sure, therefore, that these conflicting evidences will not be ignored. The future of Flood geology depends on resolution of these and other problem areas.

Should we be downcast at this controversy within our ranks? Not at all! My contacts and communications around the globe make me very optimistic. In the past individual creationists and creation organisations have tended to think and work in isolation from one another, but now cooperation, communication, sharing and networking is increasingly apparent, so that as we talk to one another and work together (iron sharpeneth iron) consensus can be reached and Flood geology advanced. The Lord is also raising up more like-minded co-workers, particularly those with professional geological qualifications who are prepared to become involved. Furthermore, the maturity of creationist organisations and the level of their grass-roots support mean that the research needed to tackle the residual problems we still face is becoming a little more affordable. These factors are now combining to produce a bigger and better creationist research effort.

However, our research needs to be coordinated, to ensure that the work of others is not duplicated. It needs to be focused, so that we are working on solving the key problem areas first, while not floundering because too much has been attempted too soon. Our resources are limited and therefore it is essential that we research in significant areas. We can be bold because of the underlying assurance that the Scriptures are reliable and without error, but we need to renew our efforts to understand what the text says about the Earth's history and what it does not say, separately (if that's possible) from preconceptions as to how the geological record fits in with it. Then we need to research strategically, thinking laterally or in novel ways if we have to in order to find explanations for baffling puzzles. Finally, we need to publish our research so that it can be reviewed, critiqued and refined by our peers, and having passed that test, propagated at the popular level. From experience we know that when misconceptions take root they become 'myths' and linger in the 'everyday' public, doing untold harm long after they have been refuted academically.

We therefore publish these papers as a service to our constituency and to the creationist research community, with the prayer that the Lord will use them to challenge any cherished ideas that may be untenable, and to help us press on with the task of understanding God's world in the light of God's Word. Whatever our differences, let us glorify God by the highest standards of scholarship and truthfulness, always mindful that we see, if we see, by reason of God's grace alone and not because we are more righteous or more intelligent than those who do not see. If we make that our aim, eventual unity on the fundamental issues must surely follow.

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