Faith and Thought

A Journal devoted to the study of the inter-relation of the Christian revelation and modern research

Vol. 98 Numbers 2 & 3 1970

G. S. CANSDALE, B.A., B.SC., F.L.S.

A Universal Flood: Some Practical Difficulties

For over a century parts of Genesis have been the subject of recurrent and bitter debate. Now, at a time when many conservative evangelicals find that the traditionally opposed views are not irreconcilable, more young Christians seem to be holding extreme literalist opinions and to be unable even to consider any other possibility. In this they are encouraged by several books and popular teachers.

The Flood, by Dr. A. M. Rehwinkel, reached its 11th printing in 1967 (Concordia) and is now being widely advertised in Britain. Morris and Whitcomb's *The Genesis Flood*, published in America in 1961, appeared in an English edition in 1969 (The Evangelical Press). Professor Enoch's little book *Evolution or Creation* (The Union of Evangelical Students of India, 1966) has been widely recommended; this is rather sketchy and in a more popular form, but it has the same literalist approach as the others, and all are based on the thesis that most of the earth's geology resulted from a universal flood. This was apparently first published in detail in books by G. McCready Price; viz., *The New Geology* (1923) and *Evolutionary Geology and the New Catastrophism* (1926).

The two latest books have been reviewed very fairly by A. N. Triton in the Christian Graduate (xx. 2. 1967 and xxii. 4. 1969), but I have seen no other reviews. It is probable that this thesis is accepted by virtually no Christian trained in any of the disciplines involved, for such find it rich in inconsistencies and special pleading. These 'Flood Geology' books all cover largely the same ground, with much theorising and speculation about conditions before, during and after the flood. Perhaps it would be helpful to look at this general problem from a more practical angle, and here I write in two different capacities: as

a former Forest Officer very interested in ecology and, currently, as a Zoo Director. This line of thought was prompted by a request to consider the logistics of the Ark, assuming that all non-aquatic forms of life must be saved. (In fact the aquatic species pose a major problem and this is discussed below.)

All schools believing in a Flood, whether universal or limited, are agreed that it was recent, i.e. within the last 10,000 years or so. Such a period has certainly seen development of forms, but hardly the multiplication of species called for by the theory, advanced by Rehwinkel, that massive 'evolution' subsequent to release from the ark greatly reduced the numbers that Noah had to house. He suggests (p. 70) that a single pair of cattle may have represented the entire bovine family, or a pair of large cats the whole of the felines. Research done while working on my book *Animals of Bible Lands* (1970) has produced only evidence to the contrary. Vertebrate land species known today, in round figures, are 2,000 amphibians, 4,000 reptiles, 8,000 birds and 15,000 mammals; even allowing that these had multiplied four times since the Flood, Noah would have had some 7,000 species to care for.

Most of the small kinds would have started off in pairs but some 40 genera of the larger mammals – the ruminants – and all the game birds, pigeons, and perhaps other orders also are 'clean', so these were admitted not in pairs but in sevens, which some commentators read as seven pairs. The endo- and ecto-parasites would be included in the cargo willy nilly – but what about other land invertebrates, mostly insects, and amounting to perhaps half a million species? They could not have survived the conditions which these writers describe.

The technical problems that faced Noah were immense. As regards space the cubit is a well attested unit and a literal reading must give the size as c. 450 x 75 x 45 feet, which is a fraction of what would be needed, while the task of feeding, cleaning etc. would be far beyond the powers of the eight men and women forming the crew, a number which is not questioned. Food, much of it bulky, would fill as much space as the animals; Noah was specifically told to provide food for both man and beast (Gen. vi: 21) and this fact alone seems to make untenable

the hibernation theory that is noted below. Unless one accepts the suggestion of a world uniform climate (and presumably uniform habitat) there is the need to provide for a range of temperature and humidity, as well as special foods. Further consideration reveals several major difficulties.

1. *The Assembly of the cargo*

If the flood laid, or relaid, all the strata the antediluvian land shapes were quite different from those we know and there may have been no oceans to cross; but can one claim that the physical problem of assembly was minimised by there being no arctic regions and no deserts, with the whole world enjoying a uniform climate which allowed all animals to be evenly distributed? There are said to have been no mountain barriers – yet the ark came to rest on one. (Rehwinkel p. 74) The theory seems to claim that all extinct species, now known from fossils, were also living in that world, but for such a complex fauna to find room all available areas and a wealth of habitats must have been filled.

With modern materials and techniques, aided by air transport and skilled staff, moving wild animals is still a big task involving losses. Can we truly envisage Noah bringing samples of the total fauna into this one vessel? Rehwinkel sees no difficulty, for when the animals 'came' he sees them reporting to Noah of their own accord, brought by an instinct implanted in them by God for this occasion. However, in the previous verse (Gen. vi: 19) Noah was instructed 'and of every living thing of all flesh, two of every sort shalt thou *bring* into the ark.' A few pages later he mentions the theory that the task was eased by widespread hibernation, only to reject it on the grounds that it implies a miraculous interference with the life of most of the animals; he also notes, but calls fantastic, another idea that Noah had a mysterious oil of which one drop per day sufficed for both food and water.

2. *The Problem of Aquatic Species*

We know, particularly from aquarium work, that many

species of all classes are highly sensitive to salinity, hardness, aeration, temperature and other factors. How did these species survive? How did the marine and freshwater forms sort themselves out again and find their niches? Or has specialisation occurred only in the last 6,000 years or so? The conditions obtaining during the flood, according to Rehwinkel, were catastrophic: the sea mamals and fish could not possibly have survived them. This is how he describes it. 'There were probably 10,000 or more Krakatoas and Vesuviases shaking and tearing at the foundations of the earth. . . . . This is not a fantastic assumption or a mere figment of the imagination.' And much more besides, though he gives no evidence for this. The survival of any form of life, including the ark itself, seems impossible.

3. *The Extinct 'Prehistoric' Reptiles*

To assume that these were all buried by the flood raises problems of spatial distribution and also of ethics. Why and how did Noah select only some groups for saving while whole orders of the giant reptiles, and many others, just disappeared? To suggest that they were all part of the cargo but then failed to adapt to postflood conditions is no more helpful.

4. *Re-distribution of Animal Life after the Flood*

For the ecologist this is perhaps the biggest snag of all. A universal flood involves disturbance on a scale beyond our imagination. It is unsafe to claim that the properties of inert matter have changed, and even the opponents of uniformity agree that the following principle has applied since the flood; waterborne material settles out according to its size, the fine particles last of all, so that most of the earth's surface must have been left covered with a uniform soft mud, forming a nearly sterile habitat useless to most animal life. Experience with the Kariba and other dams making lakes of only a few thousand square miles shows how these sediments form and also how vegetation is killed by comparatively shallow immersion. To this must be added intense turbulence for months on end and

water that before long would be uniformly brackish, and therefore lethal to most plant life and invertebrates.

In what form had the vegetation survived? How was this mud colonized with flora appropriate to the infinitely varied soil and climate zones that we know today? How did the animals retrace their steps, or spread into new lands? How, for instance, did the flying squirrel, of hamster size, reach North America? How did the order of marsupials alone get to Australia, and yet are hardly known elsewhere? What did the specialized tree animals do while their forests were growing? Most of these are severely practical questions such as field naturalists would ask in the knowledge of what floods, cloudbursts and tidal waves etc. can do over relatively small areas. A world-wide flood lasting for upwards of six months would mean universal devastation, whether or not it involved laying down all the strata in a series of huge tidal waves. These and many other difficulties seem quite insoluble in ordinary terms.

To be more constructive, I have no doubt about the flood's historic nature, which is plainly attested by our Lord. There is widespread mention of such an event in other ancient records, and there are many signs of flood remains in parts of the Fertile Crescent, though it is hard to date and correlate these, which is true also of some other early Biblical happenings. Further, the men of that early period were able to catch, train and domesticate a range of large wild animals. It was they who brought the Nubian Wild Ass and the Aurochs, or Wild Ox, into human service. Two Hebrew words for cattle are found in the early chapters of Genesis. *Behema* is a general term for animals but in such contexts usually refers to domestic stock; *miqneh* corresponds rather closely to the OE *chattels*, or movable possessions, and often means, or includes, stock. Noah must have had domestic animals, which were necessary to make possible such settlements as are described in Gen. iv: 17, while v. 20 'Jubal . . . the father of such as . . . have cattle' is hard to interpret otherwise.

We shall never know just how the formidable task of domestication was approached but the late Professor Zeuner, by far the greatest authority in this field recently, has recorded most

of the known facts in his *History of Domesticated Animals* (Hutchinson, 1963). For many centuries after the earliest period, especially in Ancient Egypt, men were masters at taming large and unlikely animals, showing an expertise that has long since been lost.

The Biblical record gives precise dimensions for a craft in which Noah and his family were to live with the animals. A wholly literal application of the English text demands sundry adjustments and raises the difficulties already discussed, so it seems right to ask ourselves whether this line is correct. There is no question about the flood's miraculous nature, seen clearly in the precise foretelling of beginning and ending, as God causes the forces which He has created to do His will, and then in the preservation of Noah and his family. There is wide agreement among conservative scholars that the flood's extent was limited, an interpretation that removes most of these difficulties. Perhaps Noah's main job was to save the breeding stock of the domesticated animals closely associated with man and largely dependent on him, thus allowing a quick start in occupying the ground which had been severely damaged, but not all entirely ruined, by the deluge. This suggestion certainly has its difficulties, especially in the words 'all' and 'whole' etc., but it has a pattern which seems to correspond much more closely with the way in which God is revealed as dealing with man and beast throughout the Scriptures.

Our Lord's reference to the flood was as a type (Matt. xxiv: 38 ff) and this is perhaps more important than the physical details – just as I regard the lesson in Jonah's incarceration as being more valuable than the exact identification of the 'great fish'. The incident of the fiery serpent in Numbers xxi has a bearing on this. There is nothing miraculous about the actual serpent, for several striking details fit *Echis*, the Saw-scaled Viper; this is known to become very numerous locally in some parts of East Africa and India, and one species is found in the Desert of Sin. The hand of God is seen in the timing, and above all in the healing which came by faith and obedience. It is interesting to know the identity of the fiery serpent but this seems less vital than the truth it teaches (John iii: 14).

When we approach such incidents intent on fitting them into a theory we have formed or adopted we may need to invoke the miraculous to an ever-increasing degree; in particular, a succession of widespread and long-continuing miracles would be needed to solve the complex of problems raised by the flood geology theory. Such certainly are not beyond the power of the God who created the universe but they would form a pattern quite foreign to what is revealed in the rest of Scriptures. This desire to buttress one's faith on literal foundations, which is true of at least some students taking this line, is the aspect of this approach that worries me. If some of these rigid props collapse, as they may well do, the result is unsettling or even disastrous.

No method of interpreting these early chapters is without some apparent contradictions. What, for instance, do we make of Abel's description as a shepherd (Gen. iv: 2)? The Hebrew word for 'sheep' and 'flock' in these verses means 'a member of a flock (of sheep or goats)'; in many cases, though not here, it is qualified to show which is meant. The plain meaning is that the animals were domesticated, for in about 260 other usages it never refers to wild animals. There is good archaeological evidence that the goat was in use at least 1,000 years before the sheep, but assuming that Abel kept goats we may ask who had domesticated them, a task that is not done overnight. This question still stands if all datings for sheep and goats are taken as post-flood. After many years of study I do not know how to reconcile these facts, but I do not let this worry me or undermine my faith. Similarly the Fall poses a problem for me; I have no doubt about its tragic truth, for it offers the only explanation of the mess this world is now in, but I would not be dogmatic about details, nor would I dare to comment biologically on the serpent in this passage. In this connection Mark Twain had a helpful comment. The portions of the Bible that worried him were not those he could not understand but those that were crystal clear, where man's position and condition are plainly stated.

The form of the biblical documents is such that we cannot regard them as a precise source of scientific facts, for many

are in obviously poetic form, while others are hard to classify, and their purpose is primarily moral and religious. I find this emphasis helpful when speaking on this general subject to student and other groups. It is more profitable to discuss man's purpose, present condition and destiny, about which the Scriptures are precise, than his physical origin, on which various views are held, by Christians and others. So I seek to make three main points: that man is unique because of his spiritual nature; that the fall alone explains his present plight; that his only hope is in accepting the finished work of Christ. This makes it possible to differ amicably in the more controversial areas, which I feel to be of less doctrinal significance, while concentrating on these basic points which man's pride hates to accept. Taking this line is not just avoiding the issue; it goes to the heart of the matter while keeping off what can so often be sterile argument adorned with a box full of red herrings.