

present conclusions concerning the age of the earth are certainly not the final word. In fact, the scientists' conclusions not only appear questionable when we consider all available secular data, but seem even more unreliable when we view them in the light of the Bible's answer to the origin of the earth. Indeed, the Bible's clearer alternative also explains many otherwise mysterious problems. We have shown that with the truth offered by the Bible, it is possible to examine the scientific evidence and reconstruct more accurately and consistently the true picture of the earth's history.

We have undertaken this dating investigation with complete confidence in the Bible's accuracy and integrity, even on scientific subjects. The faithful and trustworthy character of the Word of God has given us boldness to use it as a plumb line by which to evaluate any conclusions of man. We have shown that the scientific evidence never threatens the Bible. It is only the unwarranted conclusions based on faulty assumptions which appear to contradict the Bible.

We closed out our study by attempting a reconstruction of some aspects of ancient history beginning with creation. While this reconstruction is speculative because of a number of assumptions which were required, I believe it is much closer to actuality than any others heretofore offered. The Biblical anchors of a precise timetable of history, together with Biblical disclosures such as the declaration of continental division, the flood, and the mountain building which followed the flood, all serve to provide dramatic help in this reconstruction. The scientific evidence of C14 activity, the chemical composition of the oceans and continents, the great volcanic ridges and rifts on the ocean floors, the "fit" of continent to continent, the presence of huge ice caps, as well as much other evidence, assist us in this reconstruction. We discovered that in the 6023-year period from creation to the flood, the world was 10-15° F. warmer than today. The mountains were lower, the seas were shallower, the vegetation was more luxuriant. The one continent that existed was populated by many animals but comparatively few men. The ravages of disease were undoubtedly still quite underdeveloped so long life spans were probably normative.

The flood of 4990 B.C. brought cataclysmic changes to planet earth. Inundated by being passed through a huge deep space water cloud as well as by deep earth water, the face of the earth was drastically altered. The world-wide temperature plummeted 20-30° F., inducing great ice caps. Much mountain building resulted as did

tremendous layers of sedimentary rocks, pockmarked by fossils and gouged by deep canyons and valleys.

The continental division of approximately 3153 B.C. again produced much mountain building. The breakup of the continent that had survived the flood assured the presence of man in every part of the world.

In our study we saw that one of the biggest errors in scientific conclusions is the perspective of time. When available evidence is examined in the crucible of a four and a half billion year time span, there is confusion as well as anomalies. When the time span of this earth's existence is reduced to the 13000 years taught by the Bible, and the available evidence is studied within this framework, the whole picture of the earth's history begins to focus more clearly. For example, the concept of a 13,000 year-old world which began to be repopulated after the flood some 7000 years ago, and which 1500 years later allowed the spawning of the first great city civilizations, surely makes more sense than the idea of mankind being around for hundreds or even thousands of millennia, and then becoming a cohesive city civilization only in the last 5500 years. Furthermore, the apparent possibility of the end of the age occurring in our time accords far better with the shorter timetable.

Admittedly, the first purpose of the Bible is not to be a textbook of science or history. The Bible is fundamentally a presentation of God's grace revealed through Jesus Christ. But, as we pointed out in Chapter 1, when the Bible does speak in any field of learning, it does so with great care, accuracy, and authority. The following three reasons might be advanced for this.

1. These subjects are often an integral part of the plan of salvation.
2. They are part of God's message to man.
3. By reason of His very nature God is accurate when He speaks.

Therefore, the Bible has much more to offer than many have supposed. I hope that others will be encouraged to build upon the suggestions offered in this book.

Appendix I

ACCESSION YEAR OF REHOBOAM

The foundation date must be termed 931/930 to be totally accurate. Thiele writes:

Attention, however, should first be called to the fact that when the date 931 is given as the accession year of Rehoboam in the Southern Kingdom and the year Jeroboam I seized the throne in the north what is actually meant is that Jeroboam came to the throne some time between the first of Nisan, 931, and the first of Nisan, 930, and that Rehoboam's accession took place some time between Tishri 1, 931, and Tishri 1, 930. Inasmuch as the accession of Rehoboam preceded that of Jeroboam, the accession of the latter must have taken place at some time after Tishri 1, 931 and before Nisan 1, 930. All that we can say with complete accuracy as to the time when these two kings began their reigns is that this took place some time after Tishri 1, 931, and before Nisan, 930, and this is better expressed by the symbol 931/930 than by the precise date 931. And due to the fact that in neither Judah nor Israel did the beginning of the regnal year synchronize with the beginning of our calendar year of January 1 and that any particular Hebrew year thus overlapped two of our calendar years, the only correct symbol under the circumstances would be such a dual symbol as 931/930.¹

I believe, however, that 931 is the correct date of the two possibilities, 931 and 930. There are other relationships within the Bible that strongly support the date of 931. Hopefully, this supporting data will be offered in another volume. However, in the main text of this book much additional support for this date has been presented, particularly from the reigns of the great pharaohs of Egypt.

¹ Edwin R. Thiele, *The Mysterious Numbers of the Hebrew Kings* (Grand Rapids, Mich.: Wm. B. Eerdmans Pub. Co., Revised Ed., 1965), pp. 53-54.

Appendix II

THE “REST” OF THE LAND OF CANAAN

The question should logically be asked, “Why does the Bible record ‘the land had rest . . . years’ in these¹ four passages in the Book of Judges?” One would think that this phrase would not apply to a period of war as serious as that of Joshua’s conquest of Canaan. The word for “rest” used in these phrases is the Hebrew word *shaqat*. It is used about thirty times in the Old Testament and is almost always translated “quiet.” It is used twice in the Book of Joshua and in both cases it is used in circumstances similar to those in the Book of Judges.

The passages in Joshua are Joshua 11:23:

So Joshua took the whole land, according to all that the LORD said unto Moses; and Joshua gave it for an inheritance unto Israel according to their divisions by their tribes. And the land rested from war.

Joshua 14:13:

And Joshua blessed him, and gave unto Caleb the son of Jephunneh Hebron for an inheritance. . . .

Joshua 14:15:

And the name of Hebron before was Kirjatharba; which Arba was a great man among the Anakims. And the land had rest from war.

The time described was the end of the initial conquest of Canaan. These statements in Joshua were made about seven years after the entrance into Canaan. The occasion was the giving of the inheritance of the land to the Israelites even though all the enemy had not been defeated.

Warfare would still continue as implied by such statements as Joshua 11:22:

There was none of the Anakims left in the land of the children of Israel: only in Gaza, in Gath, and in Ashdod, there remained.

We read in Joshua 14:12:

Now therefore give me this mountain, whereof the LORD spake in that day; for thou heardest in that day how the Anakims were there, and that the cities were great and fenced: if so be the LORD will be with me, then I shall be able to drive them out, as the LORD said.

And in Joshua 17:17-18:

And Joshua spake unto the house of Joseph, even to Ephraim and to Manasseh, saying, Thou art a great people, and hast great power: thou shalt not have one lot only: But the mountain shall be thine; for it is a wood, and thou shalt cut it down: and the outgoings of it shall be thine: for thou shalt drive out the Canaanites, though they have iron chariots, and though they be strong.

Yet the first two passages in this appendix emphasize that the land had rest from war. This could be understood as “rest from the major conflict” with the future wars against the enemy to be considered as “mopping up” operations. Or it could mean that a period of time was to pass during which the division of the land between the tribes would take place and during this time the whole idea of conquest would be set aside.

Another possibility suggests itself, however. In both verses that mention “the land had rest from war,” the accompanying information indicates that an inheritance was received. In the first, Israel received the whole land as their inheritance (Joshua 14:13). If we realize that Canaan was the promised land, the land that prefigures salvation and heaven, we can begin to see why God chose this particular language. In these passages God is pointing to the rest that the believer receives when he is saved and the rest that is brought to fullest fruition when the believer inherits the new heaven and earth. Hebrews 3 and 4, of course, presents Canaan as an Old Testament type, prefiguring the rest the believer receives in Jesus Christ.

The giving of Hebron as an inheritance to Caleb further strengthens this concept. The only land that Abraham ever purchased was located in Hebron (Genesis 23:19). He purchased this land as a burial ground. It was an act of faith that indicated his complete trust that God would some day give the world to the believers as an everlasting inheritance (Romans 4:13). When the world is given to the believers as an everlasting inheritance, it will be as the new earth

where righteousness dwells (II Peter 3:13). The historical type in Joshua must then include the statement “the land had rest from war” (Joshua 11:23) for that is the condition of heaven or the new heavens and the new earth. The meek shall inherit the earth when Satan has been destroyed from the earth.

In the next book, Judges, however, the notices which contain the word *shaqat* do not make reference to the fact that there was no war (Judges 3:11, 3:30, 5:31, 8:28). Nor do they speak of the land as an inheritance for Israel or any individuals or tribes. Rather, Israel lived in the presence of enemies as part of God’s expressed will for them.

We read in Judges 2:23-3:1:

Therefore the LORD left those nations, without driving them out hastily; neither delivered he them into the hand of Joshua. Now these are the nations which the LORD left, to prove Israel by them, even as many of Israel as had not known all the wars of Canaan.

We immediately see in this arrangement a similar figure to the verses we looked at in Joshua. Whereas in Joshua the type was of heaven and the new earth where all of Satan’s activities have come to an end, in the references in the Book of Judges, the figure is that of salvation. When we are saved, we have come to the land of rest but the warfare has not come to an end. It has ended as far as our relationship to God is concerned (we are at peace with Him), but it is not ended as far as our relationship to Satan is concerned. God has assured us that Satan cannot make us sin. He has assured us that we can be victorious over sin; He has assured us that nothing can separate us from the love of God. But we must fight the good fight. We must crucify the flesh with its desires. We must strive for holiness.

In other words, we have arrived in the land of rest, but the war is not over. It is over in principle because of Christ’s victory on the cross over Satan. It is over in principle because the believer has been freed from bondage to Satan, but Satan still attacks, and in this sense the warfare continues. For a time, Satan can appear to be victorious (witness David’s sin of adultery and murder), even as Israel was in bondage for a time to the enemy, but in this bondage the Christian does not again become a citizen of Satan’s kingdom. He never leaves the land of rest which is salvation through Christ. Israel, too, continues in the land of rest even though they suffered affliction by the enemy when they took their eyes off God. This affliction was brought against

them by Cushanrishathaim, Eglon, Jabin, and Midian, during the first 200 years in the land of rest. It is surely more than coincidental that the same word *shaqat* is used in other prophetic passages which anticipate salvation (see Jeremiah 30:10, 46:27, Ezekiel 38:11).

Therefore, in these four historical chronological notices of Judges, God is giving more than just historical information. He is using these figures or types of salvation and heaven even as Canaan and Israel are great types of heaven and the believers who enter heaven. It becomes quite logical then that the periods during which the land had rest would contain within them conquest and bondage.

¹ See Judges 3:11, 3:30, 5:31; 8:28.

Appendix III

AARON'S GENERATION AND THE NUMBER 153

In the first four chapters of this book we learned that God has given us a trustworthy and accurate calendar that begins with Adam's generation and continues generation to generation until the time of Aaron. Now we are going to demonstrate that God has also hidden within Scripture the truth that this generation pattern continues all the way to Christ's generation. In developing this truth, we shall also discover that God utilizes the mistakes of men to accomplish His perfect will. For example, He used the sins of Joseph's brothers to save the family of Jacob during the famine. Before seeking the generation sequence beyond Aaron, let us refresh our memory by recapitulating our previous findings.

We learned that Enosh, grandson of Adam, became the figure or representative of the first patriarchal period or generation. His period continued for 905 years and was followed by a succession of other generations, each named after a patriarch and each lasting for the entire life span of that patriarch. These generations followed one another until just before the flood. Even as in the case of Adam where God gave us detailed information to show that Seth was the immediate son of Adam, and Enosh the grandson, so at the flood, God provided additional information. Lamech, the patriarch who followed the generation of Methuselah was 182 years old when Noah was born to him as an immediate son. We also discovered that Shem was the grandson of Lamech. Shem in turn became the figure or personality of the next patriarchal period or generation.

Again, there follows a succession of generations each named after a patriarch and each beginning with the year of the birth of that person and ending with the year of his death. This calendar continues through the generation of Nahor. In the 130th year of the patriarch Terah who followed the generation of Nahor, Abram was born to Terah and was, of course, an immediate son. Because at this time God established Abram as the head of the Jewish nation, as well as the father of all

believers, God again gives much more detail regarding these events in history. He shows us quite plainly that Isaac was the immediate son of Abram, and that Jacob was the immediate son of Isaac. The time sequence during this important period is carefully given in the Bible.

Following Jacob, we discovered that Levi, the immediate son of Jacob, was the representative of the next patriarchal period. He was followed by Amram. At Amram's death Aaron became the representative for the next patriarchal period. Thus, we have a consistent and logical sequence in the march of time from Adam to Aaron.

After Aaron a problem arises. Aaron died 40 years after the Israelites left Egypt, but there is no genealogical record that follows through in an unbroken fashion from Aaron to Christ, who, as we have seen is the representative or head of the last and final generation. Thus, there apparently exists a discontinuity in the genealogical table.

This is not fatal to the development of a chronological timetable, however, because there is sufficient evidence available to tie the time of Aaron to the time of Christ. This evidence is based on a great deal of information that diligent Bible study as well as archaeological and historical research reveals. Is there genealogical continuity in any sense? A search for genealogical continuity between the Exodus and Christ reveals two possibilities. The first is to investigate the tribe of Judah from which Jesus came. But God gives no information concerning the tribe of Judah that might be used for calendar purposes, so it must be excluded. The second may be found by looking again at Aaron and the tribe of Levi. We will discover as we look at the Biblical record that there may exist a continuity between the generation of Levi, Amram, Kohath, and Aaron with that of Christ.

The one continuous event that extended from Aaron to Christ was the priesthood after the order of Aaron. The Levitical priesthood as it is called in the Book of Hebrews continued until it was replaced by Christ who was a priest after the order of Melchizedek.

We read in Hebrews 7:11-12:

If therefore perfection were by the Levitical priesthood, (for under it the people received the law,) what further need was there that another priest should rise after the order of Melchisedec, and not be called after the order of Aaron? For the priesthood being changed, there is made of necessity a change also of the law.

Thus, in a real sense the generation of Aaron continued until the coming of the generation of Christ. Christ's coming effectively ended the bodily descent of the order of Aaron.

This becomes even more evident when another priest arises in the likeness of Melchizedek, who has become a priest, not according to a legal requirement concerning bodily descent but by the power of an indestructible life (Hebrews 7:15, 17).

The Bible teaches that in the Old Testament, the Aaronic priesthood continued until the coming of Christ.¹ It then ceased and Christ became the high priest. He continues as high priest throughout the balance of history and on into eternity. Since Aaron was the representative of the Old Testament period, we could logically say that Aaron's generation or patriarchal period continued until Christ. Christ's generation followed Aaron's and continues on forever.

The questions that then must be asked are: What is the precise date of the end of Aaron's generation and the beginning of Christ's? If Christ's generation actually began with His birth, which occurred several years B.C., must we decide that Aaron's generation continued until the actual birth year of Christ? We note that for calendar purposes Christ's generation began at A.D. one. We are presently in the calendar generation of Jesus Christ. A.D. 1950 signifies the year of our Lord 1950 which indicates the passage of 1950 years from the beginning of A.D. one rather than 1950 years from the birth of Christ several years B.C. We also know that Aaron's generation began with his birth. According to Exodus 7:7 he was three years older than Moses. Moses was 120 years old when he died (Deut. 34:7). Moses died just prior to the end of the wilderness sojourn which was the year 1447 B.C. Thus Aaron would have been born 123 years earlier which was the year 1530 B.C. Thus, it would appear that we are to consider that Aaron's generation continued from his birth in 1530 B.C. to A.D. one at which time Jesus' generation began. Therefore, it continued for a period of 1530 years. The genealogical table is thus completed without any exceptions from Adam to Christ.

A Catch of 153 Fish

We now look at the Gospel of John to possibly find another clue to help us relate Aaron's generation to Christ's generation, and to show that God intended for Aaron's generation to continue until Christ's began in A.D. zero. We cannot be positive that the arguments

which will now be presented are with absolute certainty the intention of God. The truth which we will outline is, however, in keeping with the nature of Biblical truth and, therefore, should at least be considered by a student of God's Word.

In John 21:10-11 we read:

Jesus saith unto them, Bring of the fish which ye have now caught. Simon Peter went up, and drew the net to land full of great fishes, an hundred and fifty and three: and for all there were so many, yet was not the net broken.

This event took place after Jesus had risen from the dead. Seven of the disciples, including Peter, had gone fishing. They had toiled all night without catching anything. At daybreak Jesus appeared and told them to cast their nets on the right side of the boat. They discovered the net contained 153 large fish. Theologians have struggled with the number 153. They have rightly sensed that it is somehow symbolically important.

How does it figure in God's revelation? If we remember that Jesus had called Peter, James, and John from their fishing some three and one half years earlier, we can begin to find an answer. At that time (see Luke 5:1-11), they had toiled all night and caught nothing. At Jesus' word they let down their nets and caught so many fish that their nets were breaking and their boats were sinking. Jesus then said to Peter in Luke 5:10, "Fear not; from henceforth thou shalt catch men." He, at that time, in a definite fashion, links the catching of fish with the catching of men, or with bringing those who have been chosen to salvation into God's kingdom.

Now it is but a few days before Christ's ascension. He is ready to give them the command to go into all the world to preach the Gospel and make disciples of all nations (Matthew 28:19). They again catch fish as they had done three and one half years earlier, but with two differences. The net did not break, and the fish were numbered.

Were these fish symbolical of all of the people who would become Christians in the New Testament era? It certainly could be so in the light of the mandate given by Christ to these same disciples to go out into the world and make disciples. Could the unbroken net be symbolic of the certainty of the salvation of the elect? One is reminded of the parable recorded in Matthew 13:47-50:

Again, the kingdom of heaven is like unto a net, that was cast into the sea, and gathered of every kind: Which, when it was full, they

drew to shore, and sat down, and gathered the good into vessels, but cast the bad away. So shall it be at the end of the world: the angels shall come forth, and sever the wicked from among the just, And shall cast them into the furnace of fire: there shall be wailing and gnashing of teeth.

Here Christ definitely relates the catching of fish in a net to those who are to be saved.

What then is the significance of the number 153? Since no facts in the Bible are accidental, what was God's purpose in stipulating the number of fish? At least one answer is suggested. If we remember that Jesus is our eternal high priest, who was foreshadowed by the Aaronic priesthood, we can see how God relates these two generations through the number 153.

The Aaronic generation or priesthood continued 1530 years. It was symbolic of the present age.

We read in Hebrews 9:8-9:

The Holy Ghost this signifying, that the way into the holiest of all was not yet made manifest, while as the first tabernacle was yet standing: Which was a figure for the time then present, in which were offered both gifts and sacrifices, that could not make him that did the service perfect, as pertaining to the conscience.

By this the Holy Spirit indicates that the way into the sanctuary is not yet opened as long as the outer tent is still standing (which is symbolic for the present age).

It is followed by the generation of Christ as we know it today and which will continue until Christ returns.

Matthew 24:34:

Verily I say unto you, This generation shall not pass, till all these things be fulfilled.

God tells us in Matthew 28:19-20:

Go ye therefore, and teach all nations, baptizing them in the name of the Father, and of the Son, and of the Holy Ghost: Teaching them to observe all things whatsoever I have commanded you: and, lo, I am with you alway, even unto the end of the world. Amen.

The ingathering of souls who become a kingdom of priests to Christ during the entire New Testament period, symbolized by the

153 fish, and the unbroken net is to continue throughout Christ's generation. Not only is Christ's generation foreshadowed by the Aaronic generation which preceded it but also through the common use of the number 153.

A very important question arises at this point. Is there Scriptural warranty for relating two events by the numbers 1530 and 153, as the Bible teaches, a period of 1530 years and about 153 fish? I believe there is. God relates spiritual truth to spiritual truth by the use of language as well as by symbols such as the sacrifices, and the temple, etc. He also relates spiritual truth to spiritual truth by means of numbers.

The number seven, for example, is considered by most believers to be the number of perfection. This thought was already established at the time of creation when God created the earth and its creatures in six days and rested on the seventh day. So whenever we see the number seven in the Bible we sense in its use the implication of God's perfect will having been performed.

As we study the Bible, we shall also find that when God uses a certain number to convey, symbolize, or illustrate spiritual truth, he often uses that same number, but in multiples of 10, to relate spiritual truth to spiritual truth. Thus, the 10 silver coins of Matthew are indicative of the completeness of believers, and so are the 100 sheep of Luke 15.

Likewise, I believe God may be relating the generation of Aaron to the generation of Christ by the number 153. The number 153 has the same symbolic or spiritual value as the number 1530. On one side it is the 1530 years of Aaron's generation or priesthood. On the other, it is the sum of all who will become priests under the priesthood of Christ. They are symbolized by the 153 fish.

In the introduction to this Appendix, reference was made to the sovereignty of God in utilizing the sins of man to accomplish His perfect will. If we reflect on the foregoing discussion concerning Aaron's generation and the number 153, we can see that the error made by Abbot Dionysius Exiguus² in the sixth century in establishing the birth date of Christ was probably a part of God's perfect plan. This Abbot, who had been given the task of tying the birth date of Christ to the calendar of his day, unexplainably made an error of several years. If he had accurately calculated the year of Jesus' birth, Aaron's generation would have been a few years less than 1530 years. As it is,

his computation gives us a figure for Aaron's generation of 1530 years which interrelates so beautifully with New Testament truth.

NOTES

¹ Was the priesthood of Aaron to continue everlastingly? We read in Exodus 40:15 that Aaron's sons would be a "an everlasting priesthood throughout their generations." How then can we contend that it continued only until the generation of Christ began? See Appendix IV for a discussion of this.

² Jack Finegan, *Handbook of Biblical Chronology*, p. 132.

Appendix IV

THE PRIESTHOOD OF AARON

With the coming of Christ, the Aaronic priesthood ceased physically. It was a change of such consequence that in a real sense the Aaronic priesthood ended with Christ's coming, even though in another sense it does continue everlastingly through Christ. Because the priesthood of Christ was a better priesthood than that of Aaron, and in fact, fulfilled all of the purposes and functions of the Levitical priesthood, it guaranteed the continuance of the priesthood until the end of the age and on into eternity. It is very helpful to note that in the account of the perfect temple given in the last eight chapters of Ezekiel, the Levitical priest named is not Aaron but Zadock. The meaning of Zadock is the same as that of Zadek or Melchizedek. It means righteous. This priest of Ezekiel can, therefore, be none other than Christ, who is portrayed as the head of the Levitical priesthood in the new heaven and earth. Therefore, God shows that while Christ was physically a descendant of Judah, He says in Hebrews 7:14:

For it is evident that our Lord sprang out of Juda; of which tribe Moses spake nothing concerning priesthood.

While His priesthood is an eternal one after the order of Melchizedek, it does satisfy the prophesy of the Levitical priesthood continuing eternally. In the Old Testament it was prophesied that the Israelites would be a kingdom of priests if they obeyed God. We read in Exodus 19:5-6:

Now therefore, if ye will obey my voice indeed, and keep my covenant, then ye shall be a peculiar treasure unto me above all people: for all the earth is mine: And ye shall be unto me a kingdom of priests, and an holy nation. These are the words which thou shalt speak unto the children of Israel.

The Israelites were condemned by the law as the Book of Romans clearly teaches, thus precluding a priesthood by virtue of physical descent from Aaron. It was Christ who became the high priest ruling

over a kingdom of priests who brought the fulfillment of this promise as He provided atonement for our sins and made us righteous before God.

I Peter 2:9:

But ye are a chosen generation, a royal priesthood, an holy nation, a peculiar people; that ye should shew forth the praises of him who hath called you out of darkness into his marvellous light.

Revelation 1:5-6:

And from Jesus Christ, who is the faithful witness, and the first begotten of the dead, and the prince of the kings of the earth. Unto him that loved us, and washed us from our sins in his own blood, And hath made us kings and priests unto God and his Father; to him be glory and dominion for ever and ever. Amen.

The promise that the Levitical priesthood would be an everlasting priesthood as well as the promise that those who obeyed would be priests, therefore, both find their fulfillment in Jesus Christ. This is true of all the Old Testament laws that deal with the sacrifices which were to continue everlastingly (Levitical 16:34, Levitical 24:3) and which do so in Jesus Christ.

It is interesting to note that Elizabeth, the cousin of Jesus's mother, Mary, was of the daughters of Aaron (Luke 1:5). One could easily surmise then that while Joseph was a direct descendant of David, as was Mary on her father's side, on her mother's side she was a descendant of Levi, as was her cousin Elizabeth. Thus, in this manner Christ could have been a direct descendant of Levi, though this is not the force of the argument in Hebrews 7.

In any case, the obvious teaching of the Bible is that the generation of the Aaronic priesthood continued by physical descent until Christ came. Christ legitimately, by virtue of his priesthood, was the representative of the next patriarchal period in which we live.

Appendix V

FURTHER NOTES ON DEEP SPACE WATER

Subsequent to 1972, when *Adam When?* was first published, a great amount of space exploration has taken place. This exploration has provided interesting and significant information relative to the matter of the earth being inundated by water when, as the Bible tells us in Genesis 7:11, “the windows of heaven were opened.” If, as we have concluded, at the time of the flood of Noah’s day, God caused the earth to pass through a deep space water vapor cloud, then we would expect some evidence of this to be found when other planets in our solar system are examined. This should be expected because of the great size of a deep space water vapor cloud.

Indeed, recent space exploration has verified this possibility. Ice, water, or water vapor has been found on almost all of the planets and/or on some of the satellites that revolve around the planets. Scientists puzzle over how the ice found on the moon could be there. That is not a serious problem to solve if the moon passed through the same water cloud that the earth passed through about 7,000 years ago.

Some of the findings of recent space exploration relative to the presence of water on other planets are quoted below.

Extensive articles concerning the findings of the Mars Pathfinder Mission were published in the December 5, 1997, issue of *Science* magazine, which reports:

Many characteristics of the landing site are consistent with it being shaped and deposited by the Ares and Tiu catastrophic floods (page 1745).

... knotty rocks may be conglomerates formed from silty sands and pebbles deposited from streams or floods or along coasts (page 1765).

In *Design and Origin of Astronomy*, edited by George Mulfinger

and published by the Creation Research Society, the statement is made:

The apparent dry Martian river beds are undoubtedly one of the most intriguing discoveries about Mars. They strongly resemble earthly river beds. And yet, there are differences as well, for unlike earth rivers, many of the Martian channels have no source, they just appear. Many begin in what is called chaotic terrain (page 84).

The references to catastrophic floods and rivers without a source are in complete agreement with the fact that great deposits of water were placed on Mars as well as on the earth as they passed through a deep space water vapor cloud 7,000 years ago.

The 1995 edition of the *Britannica: Macropaedia, Knowledge in Depth* made numerous references to ice, water, and water vapor on many of the planets and/or some of their satellites. Some of the references are as follows.

Page 455:

In the outer solar system are low density satellites such as Saturn's Tethys with a density of 1.2 g/cm^3 . This object must consist mainly of ice.

Page 465, in a statement discussing surface properties of Mercury:

Subsequent radar observations have shown small, highly scattering polar caps, interpreted to be water and other ices trapped in high-latitude areas perennially in shadow.

Page 494, a statement discussing the atmosphere of Mars:

Evidence suggests that the atmosphere was much denser in the remote past and that water was once much more abundant on the surface. Only small amounts of water are found in the lower atmosphere today, occasionally forming thin ice clouds at high altitudes and, in several localities, morning ice fogs.

Page 495:

Water is only a minor constituent of the Martian atmosphere (a few molecules per 10,000 at most), primarily because of low atmosphere and surface temperatures. The Martian atmosphere is effectively saturated with water vapor, yet there is no liquid

water. The temperature and pressure of the planet are so low that water molecules can exist only as ice (solid) or as vapor.

Page 507, in a statement discussing two of the four largest moons of Jupiter, which:

. . . had surfaces covered with water ice.

Page 517, in a statement discussing the satellites of Uranus:

Water ice shows up in the spectra of the five major satellites. . . . The obvious implication is that the surfaces consist of dirty water ice.

Page 521, regarding Neptune:

Clouds of water ice are expected to occur at depths within Neptune's atmosphere where the pressure is in excess of 100 bars.

Page 522, in a statement discussing Triton, the largest moon or satellite of Neptune:

Triton's low mass is likely a consequence of a predominantly water-ice interior surrounding a denser rocky core.

The Biblical account of the flood of Noah's day helps greatly to explain much of the evidence of ice on the moon and water on Mars as well as suggest a solution to the presence of ice, water, or water vapor on some of the other planets or their satellites.

Appendix VI

FURTHER NOTES ON THE REIGN OF SESOSTRIS III

In Chapter 7 the timetable of the reign of Sesostris III was discussed. We discovered that 1888 B.C. appears to be the logical date for his first year. This satisfies the secular record as determined by a Sothic Festival in the seventh year of his reign and relates it to a like celebration on Thoth I, A.D. 139. It also satisfies the Biblical record very precisely.

Some archaeologists, however, conclude that other data must be considered to arrive at the precise date of the Sothic Festival in any year. Based upon tables prepared by Neugebauer they conclude that the date of Sothic rising depends on the arc of vision (b) and the latitude of the city from which the viewing took place. Moreover, the 1460 years must be corrected slightly to take into account the precession of the equinoxes. Edgerton concludes that the viewing could have taken place from as far south as 29.2° (el-Lahem) or as far north as 30.1° (Heliopolis). Furthermore, he believes the arc of vision could have ranged from 8.6° to 9.4° . Thus, he concludes the first year of Sesostris III could have been somewhere between 1870 B.C. and 1882 B.C.¹ He hastens to add, however:

These limits may be a few years too narrow, since the value of B is subject to correction by competent astronomical authority on the basis of future experiments.²

We might note, however, that assuming Edgerton's computations and assumptions are correct, the city of Tanis or Avaris must also be considered as a candidate from which the viewing took place, for it was the seat of rule during Joseph's rule as Prime Minister. If B equaled 9.5° at the latitude of Tanis (31°), then the 7th year of Sesostris III could have been 1882 or 1883 B.C. which coincides with the Biblical record and the secular conclusions we discussed in Chapter 7.

Another calculation was made by Ingman. He set forth the following table for the Sothic rising on Thoth I.³

Length of Cycle	Duration
1456 years	4226 B.C. to 2770 B.C.
1454 years	2770 B.C. to 1316 B.C.
1452 years	1316 B.C. to 136 A.D.
1449 years	136 A.D. to 1585 A.D.

In these calculations he assumes the arc of vision (B) varied from 8° in 4000 B.C. to 9° in 2000 A.D. Thus, B would have been about 8.4° in 1316 B.C. He furthermore assumes the viewing took place at Memphis (latitude 29.9°).

If his computation is correct, the Thoth I Sothic Festival could have been celebrated in 1316, 1317, 1318, or 1319 B.C. If the arc of vision was the few tenths of a degree from 8.4°, the celebration could have occurred a few years later and embraced the year 1322 B.C., which upon calculation agrees with the Biblical data. Moreover, if the viewing had taken place in Tanis at latitude 31°, the year 1316 would have shifted a few years later to approximately 1322 at B = 8.4°.

From the above notes it is obvious that if the secular record's date of A.D. 139 for a Thoth I Sothic rising is used as a basis for calculation, and if the anniversary of the Sothic rising is figured at 1460 years as Breasted, Wheeler, and Finegan have done, then exact agreement with the Bible is obtained.

If the computations of Edgerton, Ingman, and others are used, an exact secular date cannot be obtained because of lack of knowledge concerning the arc of vision employed and the latitude of the city from which the viewing took place. However, the range of possible dates based on the data supplied by these latter men gives complete assurance that the Biblical date 1888 B.C., as the first year of the reign of Sesostri III, is tenable.

From the above evidence it seems entirely feasible that the earlier computation of Breasted, Wheeler, and Finegan for a Thoth

I rising in 1322 B.C., as based on a similar rising in 139 A.D., is dependable. Thus, the seventh year of Sesostris III would have been 1882 B.C. and his first, 1888 B.C.

¹ W. F. Edgerton, "Chronology of the Twelfth Dynasty," in *Journal of Near Eastern Studies* (Chicago, University of Chicago Press, 1942), pp. 308-309.

² *Ibid.*

³ M. F. Ingman, "The Length of the Sothic Cycle," in *Journal of Egyptian Archaeology* (pub. by Egyptian Exploration Society, London, 1969), p. 39.

Appendix VII

MERNEPTAH'S REIGN

A second solution is possible. If Merneptah's statement that Israel is without seed were actually written one, two, or three years after the murder of the sons of Gideon, and there is at least a possibility that this is so, and during this period Israel was still in a state of anarchy, then Merneptah's first year could have been two or three years later and the first year of Rameses II would have been 1276. This year is one of the five possible as his first year. Until additional information is obtained relative to the time of Merneptah's accession, either date of 1279 or 1276 must be considered to be concordant with the Biblical date of 1207 for the death of Gideon. For the moment, the date 1279 appears the more logical of the two. In any case, the Biblical date provides the possibility of far more accurate dating of Rameses II's reign than anything that has been available strictly from the secular record.

Appendix VIII

FURTHER DISCUSSION ON RADIO CARBON DATING

While we have called attention to some of the frailties inherent with radiometric dating, this does not mean that dating by such methods is to be considered a lost cause. Our desire has been to make certain we do not allow assumptions to prevail which give conclusions contrary to that permitted within a Biblical framework. We have emphasized, for example, the presently extremely fragile basis for using Ar 36 as a help in potassium argon dating.

The carbon 14 analysis of this volume is based upon certain assumptions. We believe that a number of these are very valid while some are less trustworthy. We believe we must accept the present information regarding the physics of C14 (half life method of formation, etc.), but the Biblical dates for Noah's flood and the creation of Adam must be considered even more trustworthy. Therefore, some of the other assumptions in the application of C14 to dating organic material must be less reliable. A brief discussion of the most important assumptions follows.

1. Equation 1 ($T = 1.4R - 1100$) gives the approximate relationship between the true age and radiocarbon age for events which occurred before 250 B.C. Is this a trustworthy equation? Enough historical dates from the period 2000 B.C. to 250 B.C. are available to assure that this equation is approximately correct. If it is substantially correct, it clearly shows that C12 had been increasing during the several thousand years before Christ. It would have to be radically changed to effect the conclusions of this chapter. One of the major results of using the equation is that it shows that probably substantial quantities of C14 were deposited on the earth during the flood. If later investigation should show that such deposition of C14 from deep space was an impossibility, it would appear to indicate that a much more careful look has to be given to the period from the flood (4990 B.C.) to the earth's division (about 3000 B.C., see Appendix IV). It is during this period of time immediately after the flood that

we have maximum changes in the earth. We have no present assurance that Equation 1 applies to a period earlier than 3000 B.C.

2. We have provided calculations based on an estimate of 72% full C14 reservoir. If later refinements should change this up or down by a few percentage points, our figures will be slightly modified, but the conclusions should not be altered. There is no evidence now appearing on the horizon that would show a 100% full reservoir. Should that ever be shown to be the case, the calculations of this chapter would require substantial change. (See Appendix XI for further discussion of this.)

3. We have calculated the pre-flood and post-flood CO₂ and temperature conditions using several assumptions which could be erroneous.

a. We have assumed the pre-flood oceans to be about one half the volume of our present oceans. If this figure changes substantially, it should not effect the conclusions offered in this chapter.

b. We have assumed, using Dr. Plass's estimate, that if there is an increase of CO₂, the ocean carbon would increase one half as fast as the land and atmospheric carbon. It is doubtful whether Dr. Plass envisioned CO₂ changes as drastic as those set forth in this chapter. As we have seen, the carbon inventory of the earth before the flood could have been on the order of 10.5 g/cm. But if the ocean volume, where most of the carbon resides, were only on the order of one half as great as it is now, the impact on the world of this much carbon could be great. The C12 saturation level of ocean water must be considered; the pH content which is a factor of the CO₂ in solution and which is directly related to marine life must also be considered. It could well be that C12 content of the oceans was not approximately doubled as we have suggested but that the increase was considerably less. Then, of course, the atmospheric C12 and the land C12 would have been substantially greater than the four times the present which we have estimated in this chapter. Such increases in atmospheric and land carbon would accord very well with the other conclusions of this chapter relative to pre- and post-flood temperature differentials and pre-flood plants and animal abundance.

4. We have assumed that a radiocarbon date of 12,000 B.P. (10,000 B.C.) is a record of the flood of 4990 B.C. Perhaps a radiocarbon date a thousand or more years older should be more

nearly the radiocarbon date for the true flood date of 4990 B.C. It does not appear that a date older than 13,000 B.C. would be reasonable. In any case, whether a radiocarbon date of 13,000 B.C. or 10,000 B.C. is used, the conclusions offered in this chapter are modified in a small degree but they are not substantially changed.

Appendix IX

TREE-RING DATING

In 1969 it was reported that tree-ring specimens had been found which provided a continuous record back to 5000 B.C.¹ By the year 1972 five tree-ring specimens had been integrated into a tree-ring chronology dating from the period 5000 B.C. to about 6200 B.C.² By the year 1983 additional specimens had been found which seemed to fit into the tree-ring chronology of this period, back to a date of 6700 B.C.

However, because the flood occurred in the year 4990 B.C., it would be impossible for a tree-ring specimen to have remained *in situ* through the flood. Therefore, the earliest specimens that can be found and integrated into a tree-ring chronology must be dated no earlier than 4990 B.C. Thus, it would appear that the tree-ring chronology must be restudied with this in mind. Obviously various assumptions are introduced when cross dating of a living tree with a dead tree is attempted. Yet this is the means by which dating has been extended back to a year far earlier than the approximate year 2600 B.C., which is the earliest year for a live tree. Because we know the dating of the Bible is absolutely accurate, we know that these assumptions have introduced error into the attempts to date older dead trees by cross dating methods.

¹ Ferguson, C. S., 1969. A 7104 year annual tree-ring chronology for bristlecone pine, *Pinus ariatata*, from the White Mountains, California, in "Tree Ring Bulletin," vol. 29, nos. 3-4.

² Ferguson, C. S., 1972. Dendrochronology of Bristlecone Pine prior to 4000 B.C. in "Proceedings of the 8th International Conference on Radiocarbon Dating," vol. 1, Organizing Institution, The Royal Society of New Zealand, Civic Centre, Lower Hutt City, Wellington, N.Z., p. 22.

Appendix X

THE DECAY/PRODUCTION RATIO OF C14

Lingenfelter concluded in 1963 that the decay ratio was approximately 1.8 to 2.5. This equals 72%, which is the figure used in our model.¹ Subsequently he arrived at a possible decay-production ratio close to unity.² This was based on Dr. Libby's proposal that 0.5 C14 atoms per second per cm² are taken out of the exchange inventory by sedimentation.² Dr. Libby arrived at this figure on the assumption that 1×10^{10} metric tons of calcium carbonates are deposited as ocean sediments each year.³ He apparently derives these figures from the conclusions based on a study of a number of ocean sediment cores taken in the Atlantic Ocean.⁴ This article postulates that the rate of Atlantic Ocean floor sedimentation is $2\frac{1}{2}$ cm per 1000 years. It further declares that the cores gave evidence of sediment deposition over a period of some 175,000 years or longer.

The conclusions derived from the study of these ocean cores are highly speculative. No recognition is given to the flood of Noah's day, which would have deposited large quantities of ocean floor sediments. No recognition is given to the continental division that occurred about 3100 B.C.

Finally, in arriving at the figure of 1×10^{10} metric tons of calcium carbonate deposited annually on the ocean floor, the assumption is made that this is a 35% part of all the sediments deposited.³ This, then, implies that the total deposition of sediments equals about 3×10^{10} metric tons of all sediments. Clark⁵ has estimated that the rivers contribute to the sea each year 2.73×10^{15} grams (2.73×10^9 metric tons) of dissolved solids. In other words, the figure of sedimentation squalling 3×10^{10} metric tons each year appears to be at least 10 times too great, even if we assume all that went into the ocean solution eventually ended up as sediment. Since ordinarily the oceans are not saturated, the amount of chemicals eventually becoming sediment is much smaller than 2.73×10^9 metric tons.

Thus, the amount of C14 being taken out of the exchange reservoir by sedimentation must be considerably less than 0.05 atoms

per second per centimeter. This number is so small that it hardly need be considered in view of the inexactness of this whole science.

This means that Lingenfelter's model⁶ should probably disregard the sedimentation rate in computing the decay rate of Carbon 14. The decay rate should then equal 13.56×8.3 equals 112.5 dpm/cm² or 1.875 dps/cm². Using the revised figure of 2.2 ± 0.4 dps/cm² for the production rate, we discover that the decay rate is 85% of production. Our figure of 72% as proposed in our model may be a bit low. However, even if a figure of 85% for the decay-production ratio were used, the essential conclusions of our model would remain substantially unchanged.

NOTES

¹ H. E. Suess, "Secular Variations of the Cosmic-Ray Produced Carbon 14 in the Atmosphere and their Interpretations," in *Journal of Geophysical Research*, Vol. 70, 1966, p. 5946.

² Lingenfelter, R. E. and R. Ramaty, 1970, Astrological and geophysical variations in C14 production in "XII Nobel Symposium volume entitled Radiocarbon Variations and Absolute Chronology," I. U. Olsson, editor, John Wiley & Sons, New York.

³ Libby, W. F., 1965, Radiocarbon and Paleomagnetism in "Magnetism and the Cosmos," NATO Advanced Study Institute on Planetary and Stellar Magnetism, American Elsevier Publishing Co., Inc., p. 64.

⁴ Erickson, D. B., Ewing, M., and Wollin, G., 1964, The Pleistocene Epoch in Deep-Sea Sediments in *Science*, vol. 146, p. 723.

⁵ Sverdrup, H., Johnson, M. S., and Fleming, R. H., 1942, "The Oceans," Prentiss Hall, Englewood Cliffs, New Jersey, p. 214.

⁶ Linenfelter, R. E. and R. Ramaty, 1970, Astrophysical and geophysical variations in C14 production in "XII Nobel Symposium volume entitled Radiocarbon Variations and Absolute Chronology," I. U. Olsson, editor, John Wiley & Sons, New York.

Appendix XI

C14 CONTENT IN FOSSILS

In our study we have insisted on the following conclusions relative to C14 production.

1. C14 production began about 13,000 years ago in the year 11,013 B.C. on the fourth day of creation when the light bearers were created.
2. The fossils and fossil fuels such as coal and oil were formed chiefly as a result of the cataclysmic flood that struck the earth in Noah's time some 7000 years ago.
3. Because the specific activity of carbon just before the flood was about one half of that which exists today, it would appear logical then that all fossils should show a present C14 date of about 12,000 years.

In the face of the above assertions one wonders why all fossils and fossil fuels such as coal and oil do not show this date by their C14 content. Many of them do, as we showed in Chapter 13, but a larger number of them do not. Many show trace amounts of C14 and many do not show any C14. How can this problem be resolved?

Dr. Melvin Cook, Professor of Metallurgy at the University of Utah, tackles this problem by suggesting that possibly:

the biosphere was effectively 'fluxed' with a several hundred fold increase in total carbon, mostly entirely free from C14, providing a means of diluting the radiocarbon content by ion exchange in the heated slurry that perhaps generated the coal and oil.¹

In analyzing the possibility of ion exchange in materials containing carbon, he declares:

In chemisorption and even strong 'structural adsorption' of an adsorbate on an adsorbent with atoms in common there is always a chance for atom exchange between the adsorbate and adsorbent. This possibility has been considered in radiocarbon

dating; there are several circumstances where it definitely occurs and evidently others where it is almost certain to occur. For example, anomalies found in dating mollusk shells from river waters (Keith and Anderson, 1963) may be cited (several other references were cited in this article). Kovalyenko (1964) found that the thermal decomposition of calcite had an activation energy of about 40 kcal/mol when decomposed under flowing nitrogen, but when the gas stream contained CO_2 at various partial pressures, the activation energy was raised to 160 kcal/mol (due apparently to blockage by chemisorbed CO_2) and the rate fell off progressively as the partial pressure of CO_2 was increased. Moreover, thermal decomposition of calcite involved induction times due to the chemisorbed film of CO_2 . The mechanism of decomposition was thus explained by taking into account CO_2 adsorption with a heat of 120 kcal/mol. Therefore, C12 and C14 exchange should occur on calcite. Furthermore, the chemisorption of CO_2 on charcoal should involve carbon exchange, a process that sometimes occurs at a finite rate even at ambient temperatures when the adsorption potential is high.

Keith and Anderson found that modern mollusk shells were very deficient in C14, and even gave radiocarbon ages of 1010 to 2300 years. They found also errors in measured radiocarbon ages in these and other specimens from river water sometimes as large as 3000 years. This is most likely due to carbon exchange with CO_3 derived from CaCO_3 deposits. Considerations given later in this chapter concerning the salt balance of the Great Basin indicate that Lake Bonneville disappeared only about 2000 years ago, interestingly enough, at a time coinciding with a persistent Indian legend which also described the nature of the disappearance of Lake Bonneville. If this were not true, such radiocarbon age determinations as those for Danger Cave (Libby, 1955) involving charcoal specimens dating around 11,500 years ago and those described by Broecker and Orr (1961) for samples taken from the shores of fossil Lake Bonneville, showing radiocarbon ages around $1-2 \cdot 10^4$ years, must be considered anomalous. Danger Cave, for instance, occurs on the shore about 100 feet above the present level of Great Salt Lake, and would, therefore, have been under several hundred feet of water 2000 years ago. Exchange C14 and C12 in samples by fresh water action would probably always have the effect of diluting the C14 in specimens where this exchange is possible, because the exchange would most generally involve carbonate deposits that contain no C14.²

Since ion exchange apparently does take place in some instances, the potential for such occurring during the flood and during continental division must have been very great. We cannot escape the conclusion that the huge and cataclysmic forces at work during these fantastic events would have thoroughly disrupted any evidence of uniform development of the earth's crust.

NOTES

¹ Melvin A. Cook, *Prehistory and Earth Models*, London, Max Parrish and Co., 1966, p. 206.

² *Ibid.*, pp. 3-4.