

A study on the 430 years of Exodus 12:40,41

Larry Wilson

Original Draft 5/93

Updated 10/94; 07/02; 11/02; 02/04; 06/07

Evidently, God predetermined the existence of sin on planet Earth to be 7,000 years (or 70 centuries). This suggestion is made on the basis that when one adds up the genealogical records in Genesis, the chronological history of Israel and the prophetic time-periods found in Daniel and Revelation, the total amount of time mentioned in the Bible adds up to slightly more than 7,000 years. The overage beyond 7,000 years appears to exist because Adam and Eve may have lived in the Garden of Eden about 30 years *before* they sinned.

The Bible says a thousand years are like a day to the Lord. (Psalm 90:4; 2 Peter 3:8) We know that God established the weekly cycle as a template at Creation because this template is found in the week of seven months, the week of seven years and the week of seven weeks given to Israel. (Leviticus 23 and 25) Did God also establish a millennial week of seven days for the duration of sin? Is it merely coincidental that Revelation 20 contains a time-period of 1,000 years? Should we regard the seventh millennium as a Sabbath millennium? Does 70 centuries allotted for the duration of sin parallel the 70 weeks granted to Israel in Daniel 9? These are interesting questions that do not have simple proof text answers.

Here's an interesting hypothesis: 1994 is an important year because it marks the end of seventy Jubilee cycles and the Jubilee calendar. I believe God's patience with sin on Earth ran out in that year and the seven angels who stand before God were given seven trumpets. (Revelation 8:2) As they "went out" from the throne to harm Earth, Jesus delayed them. (Revelation 7:1-4) Jesus is waiting for just the right "hour" to select and seal 144,000 people. The right hour might be defined as counting backwards 1,335 days (the length of the Great Tribulation) from the end of the sixth millennium. In other words, if the 6000th year of sin happened to terminate on April 19, 2015 (God's year operates from Spring to Spring), the Great Tribulation could begin around August 22, 2011. The sealing of the 144,000 could occur a week or two before the August 22 date.

The larger idea behind this hypothesis is that if Jesus closes the "Friday" millennium by destroying the kingdoms of Earth (at the Second Coming), then the 1,000 years that follow would be a Sabbath of rest for the land. Planet Earth would rest from the works of sin during a Sabbath millennium. This hypothesis is interesting because the *first full day* for Adam and Eve was a Sabbath rest and the *first full year* for Israel in the Promised Land was a Sabbath year. Will the *first full millennium* for the saints be a Sabbath millennium? On the other hand, if we say that God is not following a millennial calendar, what is the point of knowing *in advance* about the duration of 1,000 years in Revelation 20? In other words, what contribution does 1,000 years bring to our overall prophetic understanding if not a definite span of time? We know that God is deliberate and purposeful in everything He does and says. On this basis we have to believe that God deliberately set the duration of 1,000 years in Revelation 20 because that length of time fits into His perfect plan somehow.

When does the 6,000th year of *sin* end? When does the 1,000 years of Revelation 20 begin? These are interesting questions that merit examination. For reasons that are forthcoming, this writer finds the year of Creation to be on or about 4014 B.C. Of course, this date is subject to dispute. This date was determined in the following manner: The Bible indicates there are 1,656 years (actually 1,646 years counting inclusively) between the creation of Adam (4014 B.C.) and the flood in Noah's day (2368 B.C.). The Bible also indicates there are 214 years between the flood and the birth of Terah (2154 B.C.), Abraham's father. (See the outline at the end of this study.) The number of years between the birth of Terah and the Exodus is disputed and this study hopes to reduce some of the controversy by

addressing three or four complex issues.

For example, some people say Terah was 70 years old when Abraham was born. Notice this text: "After Terah had lived 70 years, he became the father of Abram, Nahor and Haran." (Genesis 11:26) Were Abram, Nahor and Haran born on the same day? No! The Bible says Terah lived a total of 205 years and at the time of death, Abram was 75 years old. (Genesis 11:32, 12:4) Therefore, Abraham was born when Terah was 130 years old. Perhaps Terah was 70 years old when He began to have offspring. Nevertheless, there are a total of 343 years (counting inclusively) between the flood (2368 B.C.) and the birth of Abraham (2025 B.C.).

One more introductory point. This writer finds the date of the Exodus to be fixed at 1437 B.C. by God's Jubilee calendar. (For a comprehensive discussion on this topic, see my booklet "Great Clocks From God.") Because the date of 1437 B.C. appears to be mathematically, prophetically and historically secure, the count of years since Creation can be reasonably determined if (a) the Biblical record of time is complete and (b) we can determine the number of years between the birth of Abraham (~2025 B.C.) and the Exodus (1437 B.C.).

430 Years or 215 Years?

How long were the descendants of Abraham in Egypt before the Exodus? Most people say 215 years, others say 400 years, and a few say 430 years. Which answer is best? To get the best answer we have to first examine the writings of Moses. Moses grew up in Pharaoh's court and he was highly educated. The Bible says he lived in Egypt for 40 years (Acts 7:23) and he lived in the desert 40 years. The Bible says that Moses was 80 and Aaron was 83 years of age at the year of the Exodus. (Exodus 7:7) Therefore, as a contemporary of the Exodus, no one else in the Bible speaks on the dating of this matter more authoritatively than Moses. This is a crucial point because Moses wrote the following words, "**Now the length of time the Israelite people lived in Egypt was 430 years.**" (Exodus 12:40, NIV, Italics mine) If the testimony of Moses is accurate, we have several tough questions to answer.

The Promise To Abraham

Before we proceed to examine the number of years in Egypt, we need to review the words spoken to Abraham (pay close attention to the words that are underlined): "Then the Lord said to [Abraham], "Know for certain that your descendants will be strangers in a country not their own, and they will be enslaved and mistreated four hundred years. {15} You, however, will go to your fathers in peace and be buried at a good old age. {16} In the fourth generation your descendants will come back here, for the sin of the Amorites has not yet reached its full measure." (Genesis 15:13,15,16)

Two statements emphasized:

- A. The Lord said to Abraham... "your descendants will be enslaved and mistreated four hundred years."
- B. The Lord said to Abraham... "In the fourth generation your descendants will come back here...."

Abraham's Family Data

1. Genesis 21:5 "Abraham was a hundred years old when his son Isaac was born (~1927 B.C.) to him." (Abraham died at 175 years of age. Gen 25:7)
2. Genesis 25:26 "...Isaac was sixty years old when Rebekah gave birth to them [Esau and Jacob in ~1867 B.C.]." (Isaac died at 180 years of age. Gen 35:28)
3. Jacob was 89 or 90 when his eleventh son, Joseph, was born (~1777 B.C.). (Jacob's age is calculated from the fact that Jacob was 130 when he entered Egypt and Joseph was 39 or 40. See texts below.)

The Ages of Jacob and Joseph

Genesis 37:2 "This is the account of Jacob. Joseph, a young man of seventeen, was tending the flocks with his brothers, the sons of Bilhah and the sons of Zilpah, his father's wives, and he brought their father a bad report about them."

Genesis 41:46 "Joseph was thirty years old when he entered the service of Pharaoh king of Egypt. And Joseph went out from Pharaoh's presence and traveled throughout Egypt."

Genesis 41:48 Joseph collected all the food produced in those seven years of abundance in Egypt and stored it in the cities. In each city he put the food grown in the fields surrounding it.

Genesis 45:4-6 "Then Joseph said to his brothers, "Come close to me." When they had done so, he said, "I am your brother Joseph, the one you sold into Egypt! {5} And now, do not be distressed and do not be angry with yourselves for selling me here, because it was to save lives that God sent me ahead of you. {6} For two years now there has been famine in the land, and for the next five years there will not be plowing and reaping. "

So, Joseph, is sold as a slave at age 17, then at age 30 he rose to Pharaoh's throne, then he spent seven years gathering food plus he endured two years of famine before his father moved to Egypt – so Joseph's age is 39 or 40 when his 130 year old father joins him. (Genesis 47:9) Therefore, Jacob is 130 when Joseph is ~40.

Alignment of years thus far

	Date
Abraham born	2025 B.C.
Isaac born	+ 100
Jacob born	+ 100 + 60
Joseph born	+ 100 + 60 + 90
Joseph sold as a slave into Egypt	+ 100 + 60 + 90 + 17
Jacob enters Egypt with family	+ 100 + 60 + 90 + 17 + 23
Total	290 years later which is 1735 B.C.

Result: From Abraham's birth to Jacob's entrance into Egypt is 290 years. If Abraham was 75 years old when the Lord called Him to leave Haran, (Genesis 12:4) one can see that Jacob entered Canaan 215 years after the call of Abraham. (290 years - 75 years = 215 years)

Of course, 215 years is exactly half of 430 years. Notice this text: "At the end of the 430 years, to the very day, all the Lord's divisions left Egypt." (Exodus 12:41) So, the count of 430 years **to the very day is a spectacular event** to Moses (who wrote this passage), but what happened 430 years earlier on Nisan 15 (the day of the Exodus)? Was it the call of Abraham as many scholars claim?

215 Years Can't Be 430 Years

Many scholars correctly conclude there are 215 years between the call of Abraham and Jacob's entrance into Egypt, and they claim that the Israelites were in Egypt for a total of 215 years, so this makes a total of 430 years *to the very day from Abraham's call*. But, two texts frustrate this conclusion.

First, after Abraham's death God forbid Isaac from going down to Egypt to live. (Genesis 26:2) So, the length of time spent in Egypt cannot be counted from the call of Abraham. Remember, God told Abraham his descendants would be mistreated for 400 years. Second, Moses says the Israelites were *in Egypt* for 430 years: "Now the length of time the Israelite people lived in Egypt was 430 years." (Exodus 12:40) How can 215 years equal 400 years of slavery or 430 years in Egypt?

Entrance into Egypt

We know that Joseph's family arrived in Egypt when Joseph was about 40 years of age and Jacob is 130. "And Jacob said to Pharaoh, "The years of my pilgrimage are a hundred and thirty. My years have been few and difficult, and they do not equal the years of the pilgrimage of my fathers." (Genesis 47:9)

When Jacob (age 130) entered Egypt, this author concludes that his son, Levi, was about 44 years of age and Levi's son, Kohath, was about 3 years of age. Levi's age needs to be known because the Bible traces the ancestry of the Israelites in Egypt through Levi's offspring.

Levi is the third born of Leah (Genesis 29:34) His age has to be 3 to 10 years older than Joseph (This writer assumes Levi is ~5 years older than Joseph). The age of Levi is deducted from the fact that Jacob served Laban for seven years before marrying Leah. Levi is Jacob's third born son, since three males (assuming no girls were born to Leah) take an absolute minimum of 27 months to gestate, Levi could have been born during Jacob's 10th year working for Laban. Since Jacob served Laban a total of 20 years (Gen 31:38) and Joseph was born the year Jacob departed Laban (Gen 30:25), Levi could have been a maximum of ten years older than Joseph. This writer assumes that Levi is about five years older than Joseph because (a) the Bible says Leah did not have children for some time after marriage. (Gen 29:31) and (b) having three sons within 27 months is possible, but not probable. The result of this calculation is that Levi is ~45 when Joseph is ~40.

Generations

Because God said Abraham's descendants would return to Canaan in the fourth generation, we have to take notice that Joseph and his eleven brothers were considered one generation. "Now Joseph and all his brothers [such as Levi, etc.] and all that generation died..." (Exodus 1:6) So, the offspring of Abraham looks like this in terms of generations:

1. Abraham - 1st generation
2. Isaac - 2nd generation
3. Jacob - 3rd generation – Lived in Egypt 17 years / died at 147
4. Levi - 4th generation – The Generation that enters Egypt
5. Kohath - 5th generation
6. Amram - 6th generation
7. Moses - 7th generation – The Generation that leaves Egypt

In order to fulfill the prophecy given in Genesis 15, the fourth generation has to leave Egypt. Therefore, we have to start counting with the generation that entered Egypt, the generation of Levi. Remember, the Lord said to Abraham... "In the fourth generation your descendants will come back here...." Since it has been asserted that Levi was 44 when he entered Egypt, notice his lineage:

Genesis 46:11 The sons of Levi: Gershon, Kohath and Merari.
Exodus 6:18 The sons of Kohath were Amram, Izhar, Hebron and Uzziel.
1 Chronicles 6:3 The children of Amram: Aaron, Miriam and Moses.

The Bible gives the ages of these four grandfathers at the time of death:

Exodus 6:16 Levi lived 137 years.
Exodus 6:18 Kohath lived 133 years.
Exodus 6:20 Amram lived 137 years.

Exodus 7:7 Moses was 80 years old at the time of the Exodus (he died at 120 years; Deut. 24:7)

Therefore:

1. Levi - lived to be 137 (Since he entered Egypt at age 44 or 45 he lived in Egypt for about 92 years)
2. Kohath - entered Egypt near age 3(?) and lived to be 133 years of age
3. Amram - lived for 137 years
4. Moses - age 80 at the Exodus (Moses died the year Israel entered Canaan at 120 years of age. Deut 24:7)

What maximum span of time does this data offer? If Kohath is 3(?) years of age upon entering Egypt, let us speculate that Amram is born near the end of Kohath's life. Let us also speculate that Moses is born near the end of Amram's life. This speculation produces a *maximum* of 347 years (130 + 137 + 80). Of course, for reproduction purposes 347 years is likely inconceivable (pun intended) but this exercise pushes the maximum number of years in Egypt to their absolute limit. The controversy here is that Moses says the Israelites lived in Egypt for 430 years. (Exodus 12:40: "Now the length of time the Israelite people lived in Egypt was 430 years.) How does Moses count these years?

Before we address a more realistic figure in Egypt (347 years is not realistic and 430 years is out of the question), we have to consider some other issues.

430 years versus 400 years?

Carefully read these two texts and notice the conflict:

1. Exodus 12:40,41 says: "Now the length of time the Israelite people lived in Egypt was 430 years. At the end of the 430 years, to the very day, all the Lord's divisions left Egypt."
2. Genesis 15:13,16 says, "Then the Lord said to him [Abraham], "Know for certain that your descendants will be strangers in a country not their own, and they will be enslaved and mistreated four hundred years. In the fourth generation your descendants will come back here, for the sin of the Amorites has not yet reached its full measure."

We know that 430 years can't be 400 years unless the 400 years is to be understood as a general expression, rounded off to the nearest century or, they could be understood as four generations of "about" 100 years each. The length of a generation is averaged by subtracting the age when offspring appear from the age of death. Historians today regard a generation to be about 50 years (in general terms, we die around 73 and begin having offspring around 23 years of age) although a specific generation for a given family can be longer or shorter depending on the lineage of that particular family. So, it is possible that 430 years could be called 400 years (death at 135 minus 35 for starting to have offspring) if God was speaking of four generations in round numbers. But there is an even greater problem.

In Genesis 15:16 God said, "In the fourth generation your descendants will come back here, for the sin of the Amorites has not yet reached its full measure."

It has been said earlier that some people put 430 years between the Exodus and the call of Abraham. The problem here is that Moses is not a member of the fourth generation from Abraham. Moses is a member of the seventh generation! So, God's comments have to start with Levi because Moses is in the fourth generation from Levi.

Seven generations: Abraham to Moses

1. Abraham
2. Isaac
3. Jacob
4. Levi
5. Kohath
6. Amram
7. Moses

The mystery deepens. Moses says the Israelites lived in Egypt for 430 years. We already know the last four generations cannot span 430 years. We have determined the longest possible span of time in Egypt to be 347 years. So, what did Moses intend for us to understand when he said, “four hundred and thirty years to the very day?” Evidently, the descendants of Israel were set free “on the anniversary” of some noteworthy event. (Exodus 12:40,41) If so, what could that event be?

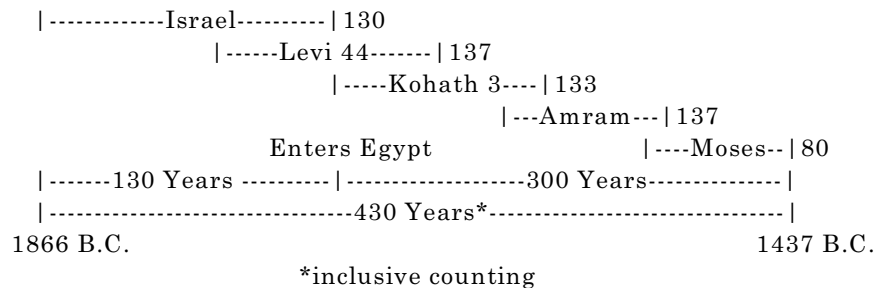
The Anniversary Event?

For the sake of solving this puzzle, let’s suppose that Moses dated the 430 years from *the birthday* of Jacob. We know that Jacob was 130 years of age when he entered Egypt and it is possible that the patriarch’s birthday was a special anniversary which all Hebrews honored each year. Moses was keenly aware that the Exodus occurred 430 years to the day of a well known event. What was it?

What could have been so special 430 years earlier – to the very day – if not the birthday of the father of their nation? Remember, the twelve tribes in Egypt are Israelites. That is, they were the family of Jacob (Israel), not Abraham (who also fathered Ishmael, Isaac and six other sons). In other words, the Hebrews in Egypt were not the exclusive descendants of Isaac (who fathered both Esau and Jacob).

The birth date of Israel (Jacob) might resolve “the 430 years *in Egypt*” problem because Jacob is 130 years old when he enters Egypt and 300 more years in Egypt could produce a total of 430 years to the very day. Wouldn’t it be neat if God delivered the Israelites on the birthday of their father? We notice that 300 years is less than the *inconceivable* maximum of 347 years, so this solution might work *if* the Hebrew language in Exodus 12:40 was translated as follows: “Now the length of time the [nation of the] Israelites [existed], which were in Egypt, was 430 years [to the very day].” One literal translation of Exodus 12:40 reads like this: “And the [total] living time [of] sons [belonging to] Israel’s which lived in Egypt [was] thirty years and four hundred years.” (*The Interlinear Hebrew-Greek English Bible*, 1984, Jay P. Green, insertions mine)

Does a literal translation of Exodus 12:40 support the idea that Israel lived in Egypt 430 years or does it better support the idea that the nation of Israel, which lived in Egypt, existed for a total of 430 years?



In this diagram, Israel's birth date is positioned as Nisan 15, 1866 B.C. We know (for reasons beyond the scope of this study) the Exodus occurs on Nisan 15, 430 years later, to the very day. In this diagram, Kohath is age 3 when Jacob and his sons move into Egypt. In this model, Kohath is 90 years old when Amram is born. (Abraham was 100 when Isaac was born.) Amram is 130 when Moses, his last son, is born. (This is reasonable because we know that Abraham sired at least six sons after he was 137 years old. Genesis 25:4-6)

This model addresses three questions. First, the four generations have to be counted as Levi, Kohath, Amram and Moses. Second, in round numbers, the span of time from the birth of Israel (Jacob) to the birth of Moses is about 400 years. Third, if the Hebrew text is translated, "Now the length of time the Israelites [existed], which were in Egypt, was 430 years [to the very day]," the words of Moses make sense *just as they read*.

Paul's Comments

There are some good arguments against dating the 430 years from Jacob's date of birth. Some people argue that Paul dates the 430 years from the call of Abraham to the giving of the law at Mt. Sinai. If Paul's statements are true, what do we do with the statements of Moses who *was present* at the time of the Exodus? Can Paul, who lived 1,500 years after the Exodus, be more accurate than Moses who was there? What do we do about the mandatory seven generations from Abraham to Moses? Notice Paul's statements:

Galatians 3:16,17 "The promises were spoken to Abraham and to his seed. The Scripture does not say "and to seeds," meaning many people, but "and to your seed," meaning one person, who is Christ. {17} What I mean is this: The law, introduced 430 years later [after the promise was given to Abraham?], does not set aside the covenant previously established by God and thus do away with the promise." (Insertion mine)

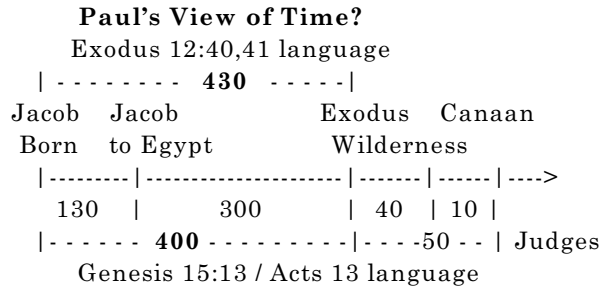
If we choose to ignore the comments of Moses, we could interpret Paul's statement to measure 430 years from the promises made to Abraham to the giving of the law at Mt. Sinai. (Most scholars do this.) Or, should we limit Paul's statement so that it is a label identifying a well known, sharply defined time-period? In other words, does Paul mean, "The promises were spoken to Abraham.... [then] the law, which was introduced after 430 years in Egypt, does not set aside the covenant previously established [with Abraham]?" Before we say any more about Paul's remarks in Galatians 3, let us examine Paul's remarks in Acts 13.

The 450 Years

Acts 13:17-20 Paul said, "The God of the people of Israel chose our fathers; he made the people prosper during their stay in Egypt, with mighty power he led them out of that country, He [God] endured their conduct for about forty years in the desert, He overthrew seven nations in Canaan and gave their land to his people as their inheritance. "All this took about 450 years. "After this, God gave them judges until the time of Samuel the prophet."

From what point does Paul measure the beginning of the 450 years? Some people say the call of Abraham. If this is the case, the approximate number of years for these historical events would have to be about 480 years (430 years plus 40 years in the wilderness plus another 10(?) years in Canaan to overthrow seven cities). On the other hand, if Paul uses the "450 years" to mean 400 years as slaves (using Genesis 15:13 language), plus 40 years in the wilderness, plus 10 years in Canaan -- conquering seven nations, then a total of 450 years appears to fit properly.

Compare Paul's statements:



Notice in the chart above, that 400 years and 430 years cover the same period of time because the 400 years cover four generations of 100 years each, but the actual number of years is 430. It's Genesis and Acts language versus Exodus language. Evidently, Paul speaks of the 430 years using the "400 year language" (per Genesis 15:13) plus he adds 50 years to cover the 40 years in the wilderness and ten years of initial conquest of Canaan. The question though is where does Paul place the origin of the 450 years?

Back To The call of Abraham

Let's assume that Paul measures 430 years from the call of Abraham in Acts 13 and Galatians 3. If this is the case, and we know that Abraham was called around age 75, the time-frame looks like this:

Dates from Abraham's call

Abraham called: age	75
Isaac born	75 + 25 (25 years later)
Jacob born	75 + 25 + 60 = (85 years later)
Joseph born	75 + 25 + 60 + 90 = (175 years later)
Jacob enters Egypt	75 + 25 + 60 + 90 + 40 = (215 years later)

There are 215 years between Abraham's call and Jacob entering Egypt. Because 215 years is exactly half of 430, this model forces a very short stay **in Egypt** as slaves – far less than the 400 years indicated in Genesis 15 or the 430 years "in Egypt" stated in Exodus 12:40,41. These are textual problems which scholars haven't been able to fully resolve, but there is an even greater problem.

Earlier, we determined the absolute maximum number of years in Egypt (from Kohath entering Egypt at age 3 to the year of the Exodus and Moses is 80) to be 347 years. Because 215 years is significantly shorter than 347 years, the 215 year time-frame is an easy fit for four generations. Notice this possible arrangement below:

Kohath enters Egypt at age 3	Start
Kohath's age when Amram was born:	75
Amram's age when Moses was born:	60
Moses' age at the Exodus	<u>80</u>
	215

Oops! Too few Hebrews in 215 years?

Before the mystery of 430 years is adequately resolved, there's a major problem that must be addressed. It's the census problem. Is it possible within 215 years to produce the number of male Hebrews, 20 years old and older, that were counted in the census at Kadesh Barnea?

Numbers 1:8 provides the following census data for each tribe:

1. Reuben:	46,500	7. Ephraim:	40,500
2. Simeon:	59,300	8. Manasseh:	32,200
3. Gad:	45,650	9. Benjamin:	35,400
4. Judah:	74,600	10. Dan:	62,700
5. Issachar:	54,400	11. Asher:	41,500
6. Zebulun:	57,400	12. Naphtali:	53,400

Total: 603,550 males age 20+

Given this data, and assuming the total years in Egypt is 215 years, we need to compare Israel's population growth with data found in the Bible for that era. (You can skip over the following textual reference and come back later for deeper study if you desire)

Genesis 46 says:

7 He [Jacob] took with him to Egypt his sons and grandsons and his daughters and granddaughters--all his offspring.

8 These are the names of the sons of Israel (Jacob and his descendants) who went to Egypt: Reuben the firstborn of Jacob.

9 The sons of Reuben: Hanoch, Pallu, Hezron and Carmi.

10 The sons of Simeon: Jemuel, Jamin, Ohad, Jakin, Zohar and Shaul the son of a Canaanite woman.

11 The sons of Levi: Gershon, Kohath and Merari.

12 The sons of Judah: Er, Onan, Shelah, Perez and Zerah (but Er and Onan had died in the land of Canaan). The sons of Perez: Hezron and Hamul.

13 The sons of Issachar: Tola, Puah, Jashub and Shimron.

14 The sons of Zebulun: Sered, Elon and Jahleel.

15 These were the sons Leah bore to Jacob in Paddan Aram, besides his daughter Dinah. These sons and daughters of his were thirty-three in all.

16 The sons of Gad: Zephon, Haggi, Shuni, Ezbon, Eri, Arodi and Areli.

17 The sons of Asher: Imnah, Ishvah, Ishvi and Beriah. Their sister was Serah. The sons of Beriah: Heber and Malkiel.

18 These were the children born to Jacob by Zilpah, whom Laban had given to his daughter Leah--sixteen in all.

19 The sons of Jacob's wife Rachel: Joseph and Benjamin.

20 In Egypt, Manasseh and Ephraim were born to Joseph by Asenath daughter of Potiphera, priest of On.

21 The sons of Benjamin: Bela, Beker, Ashbel, Gera, Naaman, Ehi, Rosh, Muppim, Huppim and Ard.

22 These were the sons of Rachel who were born to Jacob--fourteen in all.

23 The son of Dan: Hushim.

24 The sons of Naphtali: Jahziel, Guni, Jezer and Shillem.

25 These were the sons born to Jacob by Bilhah, whom Laban had given to his daughter Rachel--seven in all.

26 All those who went to Egypt with Jacob--those who were his direct descendants, not counting his sons' wives--numbered sixty-six persons.

27 With the two sons who had been born to Joseph in Egypt, the members of Jacob's family, which went to Egypt, were seventy in all.

From this data the following is gleaned:

Jacob's offspring totals when he enters Egypt at age 130 in sons, grandsons and great-grandsons

1. Reuben:	4	7. Joseph:	2
2. Simeon:	6	8. Levi:	3
3. Gad:	7	9. Benjamin:	10
4. Judah:	3 / 2	10. Dan:	1
5. Issachar:	4	11. Asher:	4 / 2
6. Zebulun:	3	12. Naphtali:	4

Some Analysis

Jacob sired 12 sons through 4 women. These 12 sons sired 50 grandsons which sired 4 great-grandsons by the time Jacob was 130. **A total of 66 males entered Egypt.** Even though Jacob sired twelve sons – His sons averaged a more reasonable 4.16 sons each (Benjamin is an exception).

We know that Jacob's male offspring numbered 66 when he entered Egypt. (Genesis 46:27) So the question is whether 66 males can produce **603,550 males** in 197 years? (**Note:** This census was taken during the second year in the wilderness of males who were 20 years of age or older, so 215 years in Egypt plus 2 years in the wilderness minus 20 years of age equals 197 years allotted for reproduction.)

The Bible says the second census, taken 38 years later (just before entering Canaan), totaled: 601,730. (Numbers 26:4,51) In other words, 603,548 men died during the remaining 38 years in the wilderness. But, 38 years later, **601,730 men** were found to be between the ages of 20 and 57 (**Note:** A 19 year old living in the wilderness for 38 years would be about 57 upon entering Canaan). The point here is that there was very little population growth for 38 years in the wilderness.

Yes, The Israelites Were Fertile

We know the number of Israelites were a problem when a new Pharaoh came to power after Joseph died. "Then a new king, who did not know about Joseph, came to power in Egypt. "Look," he said to his people, "the Israelites have become much too numerous for us. Come, we must deal shrewdly with them or they will become even more numerous and, if war breaks out, will join our enemies, fight against us and leave the country." (Exodus 1:8-10)

"But the more they were oppressed, the more they multiplied and spread; so the Egyptians came to dread the Israelites and worked them ruthlessly. They made their lives bitter with hard labor in brick and mortar and with all kinds of work in the fields; in all their hard labor the Egyptians used them ruthlessly. The king of Egypt said to the Hebrew midwives, whose names were Shiphrah and Puah, "When you help the Hebrew women in childbirth and observe them on the delivery stool, if it is a boy, kill him; but if it is a girl, let her live." The [two] midwives, however, feared God and did not do what the king of Egypt had told them to do; they let the boys live." (Exodus 1:12-17, insertions mine)

If two midwives can serve the entire Hebrew nation, how many Hebrews are there? To produce the largest population in the shortest period of time, we have to make some assumptions about the birth rate of the Israelites in Egypt. Remember, we are trying to produce 603,550 surviving males in 197 years. So, it is generously assumed that each male produced five surviving males during a period of 50 years.

(**Note:** Five surviving males also implies five surviving females. Did most families have ten children? Maybe, but who can say? We do know the average offspring of Jacob's sons was 4.1 males and from this, we assume 4.0 females. Infant mortality rates for this time-period are unknown.

However, from Genesis 46:7-27 we have some idea about birth rate totals when a highly prolific Jacob (having four sons children via four women) entered Egypt at age 130.)

OK, Now Look at the Numbers

We know that the largest tribe, Judah, had 74,600 men age 20+ when the first census was taken in the wilderness. According to Genesis 46, Judah entered Egypt with three sons and two grandsons – a total of 5 sons. Here's a reproductive model based on the premise that each of Judah's five offspring produced five surviving sons every fifty years in Egypt for 350 years:

**How Long Does it take for Judah's Offspring to Equal 74,600
Testing 350 Years in Egypt**

	50	100	150	200	250	300	350 years
Births per generation	5	25	125	625	3,125	15,625	78,125
Deaths from previous generation	0	5	25	125	625	3,125	15,625
Net increase in sons	5	20	100	500	2,500	12,500	<u>62,500</u>

Questions

Looking at the chart above we observe that it would take about 350 years to produce a total of 62,500 surviving males. This is not terribly far above the actual count for Judah of 74,600. But, the question remains: Can 74,600 surviving males be produced in 197 years by Judah's offspring? According to our assumption that each generation recycles every 50 years, the answer is "No." Add to this the fact that a generation was counted as a hundred years, not fifty years, and the problem really gets worse. In this illustration 300 years are required to produce 12,500 surviving males (and this implies 12,500 surviving females for a total of 25,000 people total).

We also have to notice that Benjamin entered Egypt with 10 sons (twice the number of Judah) but at the time of the census his tribe was one of the smallest, with only 35,400 males. These two extremes can't be discarded in our mathematical solution to this problem because 74,600 surviving males have to come from five men during the time the Israelites were in Egypt!

If we use the data above and compare it with the smallest tribe, Manesseh, having 32,200 men in 197 years who were age 20+, this outline suggests that 300+ years would not satisfy their population count. *The data presented in this chart seems to thwart the idea that the Israelites lived in Egypt for a total of 215 years.*

Now comes a more difficult question. Is the ratio of one father to five surviving sons every 50 years for 350 years reasonable? What do genealogical records for this time-period suggest? Notice this sample which may or may not be representative of reproduction while in Egyptian bondage:

- Amram - 2 sons -- lived 137 years
- Kohath - 4 sons -- lived 133 years
- Moses - 2 sons -- lived 120 years

Average: 2.66 sons per father per 130 years

Smaller numbers

If we reset the reproduction rate to one father and three surviving sons per forty years (less time, less children), notice the result:

		Number of Offspring Years in Egypt									
		40	80	120	160	200	240	280	320	360	400
Births		3	9	27	81	243	729	2,187	6,561	19,683	59,049
Deaths		0	3	9	27	81	243	729	2,187	6,561	19,683
Net Increase		3	6	18	54	162	486	1,458	4,374	13,122	<u>39,366</u>

Obviously, alterations produce alternate answers. However, our objective is to see if we can find a reasonable ratio of fathers to offspring and the number of years for a reproductive cycle for one generation to produce 603,550 males in 197 years. One can see by looking at this chart that 197 years is not enough time to produce the census totals for any tribe given in Numbers. When we factor in the population data between the first census and second census, and the reproduction cycles tested above, the number of years in Egypt favors a number greater than 215.

Long or Short Chronology?

Given the complex issues involved in this study, this writer prefers to date the 430 years in Egypt from the birth date of Jacob with these qualifications:

- The four hundred years mentioned in Genesis 15:13 are defined as an average span of 100 years per generation
- The four generations mentioned in Genesis 15 point to Levi, Kohath, Amram and Moses
- The precisely dated 430 years of Exodus 12:40,41 is an anniversary for Jacob’s date of birth. Therefore the words, “to the very day,” correspond to the birthday of Israel, the father of this nation.
- The KJV and other translations indicate the total time in Egypt was 430 years. (Exodus 12:40,41) The words of Moses may be translated from the Hebrew to mean the total number of years since the birth of Israel, whose offspring was in Egypt, was 430 years.
- Population tables suggest a period of 197 years cannot produce the necessary numbers to meet the census in the wilderness – 603,550 males.
- The 430 years and 450 years mentioned by Paul are subject to some interpretation given that we can’t precisely say if Paul wanted to define this time-period or if Paul wanted to identify a well known time-period.

Because any solution to this mystery faces textual conflict, one has to justify his conclusions with a certain amount of explanation. When all of the above is factored together, this writer finds the best solution to be 430 years in Exodus 12:41 begins with Jacob's birth date.

From Israel's birth to entering Egypt: 130 years

Years Israel's family is in Egypt: 300 years

Israel's offspring: From 66 males to 603,550 males in 300 years (Four generations)

Creation Dating

If the 430 years in Exodus 12 are measured from Jacob's birth to the Exodus in 1437 B.C., then we should be able to determine the date of Creation – within a margin for error – if the genealogical record in the Bible is complete. There are two ways of counting backwards from the Exodus in 1437 B.C. (According to the Jubilee Calendar, the date of the Exodus is beyond reasonable argument.) The counting can be done exclusively or inclusively. If we count exclusively (as we normally count today), we would count as follows:

Adam 130 when Seth was born
Seth 105 when Enosh was born
Enosh 90 when Kenan was born, etc.

So, the total number of years from Adam's creation to the birth of Kenan equals 325 years (plus a margin for error of +3 years). A margin of +3 years is necessary because Adam could have been 130.9 when Seth was born and Seth could have been 105.9 when Enosh was born and Enosh could have been 90.9 when Kenan was born. (In other words, it's probable that offspring were not born on the birthday of their fathers.) So:

Using **exclusive counting**, the maximum amount of time between Adam's creation and Kenan's birth could be:

130.9
105.9
90.9
327.7 calendar years

If Moses used exclusive counting for the genealogies down to the flood, the 1,656 years recorded in Genesis 5 should be understood to have an extreme margin of error of about +9 years. On the other hand, if Moses used inclusive counting (which is far more likely*), then the 1,656 years should be understood to have a margin of error of about -9 years.

For example, the total number of years from Adam's creation to the birth of Kenan equals 325 years according to Moses, but if Moses counted inclusively we have to subtract 3 years from each generation because Adam's 130th year and Seth's first year would be the same year. Similarly, Enosh's 90's year and Kenan's first year would be the same year.

So, using **inclusive counting**, the number of years from Adam's creation to Kenan's birth would be:

130
+ 105 (-1)
+ 90 (-1)
325 years
- 2
323 calendar years

(*Note: Two points must be presented here. First, I have not found one instance in the Bible where exclusive counting is used. In fact, all 18 prophetic time-periods in Daniel and Revelation use inclusive counting. Luke 3 uses inclusive counting and Jesus used inclusive counting in Matthew 12:40. Further more, Moses uses inclusive counting in Exodus 12. So, I favor inclusive counting when calculating the calendar years between the Exodus and Creation. Second, inclusive counting doesn't produce cumulative error over long spans of time. It doesn't matter whether Adam as 130.4 or 130.9 years old when Seth was born because Adam's 130th year and Seth's first year are the same year and the same is true for each generation.)

The following list counts **backward** from the Exodus to Creation's date using inclusive counting. For example, the first date is calculated as follows: 1437 B.C. + 430 years back to Jacob's birth minus 1 year for inclusive counting = 1866 B.C.

1437 B.C. The Exodus (then 430 years earlier)

1. 1866 B.C. Jacob born (then 160 years earlier)
2. 2025 B.C. Abraham born (then 130 years earlier)
3. 2154 B.C. Terah born (then 29 years earlier)
4. 2182 B.C. Nahor born (then 30 years earlier)
5. 2211 B.C. Serug born (then 32 years earlier)
6. 2242 B.C. Reu born (then 30 years earlier)
7. 2271 B.C. Peleg born (then 34 years earlier)
8. 2304 B.C. Eber born (then 30 years earlier)
9. 2333 B.C. Selah born (then 35 years earlier)
10. 2367 B.C. Arphaxad born (then 2 years earlier)
11. **2368 B.C. Year of the Flood** to Arphaxad (then 600 years earlier)
12. 2967 B.C. Noah born (then 182 years earlier)
13. 3148 B.C. Lamech born (then 187 years earlier)
14. 3334 B.C. Methuselah (then 65 years earlier)
15. 3398 B.C. Enoch born (then 162 years earlier)
16. 3559 B.C. Jared born (then 65 years earlier)
17. 3623 B.C. Mahalalel born (then 70 years earlier)
18. 3692 B.C. Kenan born (then 90 years earlier)
19. 3781 B.C. Enosh born (then 105 years earlier)
20. 3885 B.C. Seth born (130 years earlier)
21. **4014 B.C.* Adam Created**

6,000 Years of Sin and 1,000 Years for Sabbatical Rest

Given the genealogical data above we can make some guesses about the termination of the 6,000th year of sin. Because Adam and Eve did not bear children in the Garden of Eden, because Adam and Eve were 130 years of age when Seth was born, and perhaps Cain and Abel were married men, (old enough to offer sacrifices for their own households), when Cain killed Abel, we are left with a window of time that ranges from a minimum of ~21 years to a maximum of about 70 years in the Garden before sin occurred. Of course, there is no way to know when Adam and Eve sinned. Nevertheless, the location of the 6,000th year numerically favors the first half of the 21st century. Note these figures using 4014 B.C. as the year of Creation:

- If Adam and Eve lived in Eden 21 years before sin occurred: 3993 B.C. thru **A.D. 2007** = 6,000 years
- If Adam and Eve lived in Eden 25 years before sin occurred: 3990 B.C. thru **A.D. 2010** = 6,000 years
- If Adam and Eve lived in Eden 30 years before sin occurred: 3985 B.C. thru **A.D. 2015*** = 6,000 years
- If Adam and Eve lived in Eden 40 years before sin occurred: 3974 B.C. thru **A.D. 2025** = 6,000 years
- If Adam and Eve lived in Eden 70 years before sin occurred: 3944 B.C. thru **A.D. 2055** = 6,000 years

*Note: Given the synchrony of the 18 prophetic time periods discussed in my article "Great Clocks From God," if Adam and Eve were in the Garden for 30 years before sin began, the 2015 date would be a very interesting alignment on several levels. The angel told Daniel that the end time is an appointed time which is also a time of wrath! (Daniel 8:19) The Father has set dates by His own authority. (Acts 1:7) The 6th trumpet date is set down to the hour, day, month and year. (Revelation 9:15) The demons know the end time has already been appointed. (Matthew 8:29) Gabriel told Daniel: "Some of the wise will stumble, so that they may be refined, purified and made spotless until the time of the end, for it will still come at the appointed time." (Daniel 11:35)

Let's suppose the 1,000 "years" of Revelation 20 will begin on Nisan 1 [New Year's Day] in God's calendar, which occurs at the first new moon, on or after the Spring Equinox. Let's also suppose the Second Coming will occur on the 1,335th day declared in Daniel 12:12 KJV "Blessed is he that waiteth, and cometh to the thousand three hundred and five and thirty days."

If this is true, we could have the following alignment:

The 1,335th day = Nisan 1, Sunday, April 19, 2015. (Note: New Moon at Greenwich, England is Saturday, 18:58 hours UT which equals Sunday, April 19 in God's Clocks due to a day starting at sundown.)

Why this date? On this particular day we have the following alignment in God's calendar:

New Day
New Week [a week begins with Sunday]
New Month [conjunction of a New Moon]
New Year [Nisan 1, New Year's Day]
The beginning of the 1,000 years (the seventh millennium)?

If so, this alignment produces the following scenario:

Wed	08/24/11	Global Earthquake / Trumpets begin
Thur	10/27/11	Persecution Begins - Babylon rises - new moon -- 42 moons of persecution
Fri	01/31/14	Devil appears -- fifth trumpet -- new moon -- five months torment begins
Sab	06/28/14	Sixth Trumpet / 5th seal martyrdom begins
Tue	02/03/15	1,260 days end of mercy (Two Witnesses end)
Sun	02/08/15	After 4 days: The 144,000 ascend / 7 Bowls begin, Firstfruits presented on Sunday
Thur	03/05/15	Universal Death Decree -- Adar 14 (Same date as Esther 9)
Fri	03/20/15	Persecution ends -- end of 42 months
Sun	04/19/15	Jesus gathers saints on the 1335th day

Remember, Nisan 1 [new moon conjunction] occurs on Sunday about 12 times a century. Here's the closest three:

Sunday, April 3, 2011
Sunday, April 18, 2015
Sunday, March 25, 2028

Since this alignment is based on the Sun and moon, the same days of the week occur each time this alignment occurs.

When the whole of Bible genealogy, history and prophecy are brought together, the end of 6,000 years of sin and the beginning of the Sabbath millennium appears to be very close. Since 1993, I

have concluded the 6,000th year will end somewhere between 1998 and 2017. We will soon see!