## A PROOF STUDY DATING BIBLICAL SABBATHS AND HOLY DAYS

In the fall of 2007 I was challenged by a group who set their observation of God's high day Sabbaths by the sighting of the first visible crescent of the new moon, rather than the traditional days known as the Hebrew Calculated Calendar which is set by the Jewish authorities.

These traditional Holy Days that I had been keeping for over 40 years were challenged as those not designated by God in his Word, but a counterfeit set of days. Could a factual proof be established for either of these beliefs?

In the spring of 2008 the Midwestern U.S. experienced unprecedented flooding. The dramatic events of this flood caused me to prepare a sermon and to later write an article documenting the passage of time during the greatest of all floods.

The following information is a study of the progression of time that begins with the Creation week and carries through to the present day calendar. Unlike the many attempts to establish a time line, starting with the present and going back to Creation to fix Biblical dates, this material will conclusively show that the day we now call Saturday (God's Sabbath,) the seventh day of the week, is a progression of seven day increments, mathematically traceable to the Creation week.

It will also prove that the Jewish preserved calendar of high Sabbaths are embedded in this incremental seven day calendar. They can be proved mathematically and Biblically to be accurate from Creation to the present time. This means that God's calendar will be verified in a factual way.

My qualifications to embark upon such a technical subject may be questioned, but God does not always do things the way we think they should be done, and by whom we may think would be capable of doing them. This work should be judged on its veracity alone.

In an unusual way my working life qualified me for this task; twenty four years as an engineer for two large corporations, solving problems of a great variety and another sixteen years of building my own successful machining business. In a word, my entire working life was spent solving problems, and a factual, traceable calendar is certainly a problem.

One factor that initiated this study of God's calendar was the challenge to prove which calendar among many being circulated amidst God's people was in fact God’s true calendar; and secondly, unprecedented flooding in the mid-western United States mentioned above, causing me to review the account of Noah’s Flood in Gen. $7 \& 8$. This study resulted in bringing to my attention the very detailed recording of the passage of time as the events of the Flood took place. These events are given to us as inspired by Christ, the Word, in a chronology of days and months through which God reveals a system for measuring time that parallels the present calculations of the Hebrew calendar.

## TIMELINE OF NOAH’S FLOOD

The previous writing on the Flood of Genesis 7 and 8, (see article at www.t-cog.org) demonstrated that the year of the Flood was 385 days in length, which is the exact length of an excessive leap year of the Hebrew Calculated Calendar. See chart \#1 in the Flood article.

Note: HCC used as "Hebrew Calculated Calendar" throughout.

All the information defining the HCC was taken from the $11^{\text {th }}$ edition of the Encyclopedia Britannica. This information is shown on partial chart \#5 on page 13, which is a copy of the information that appears on pages 3-7 of that article. The Gregorian dates that appear here for the first day of the month Tisri are the Feasts of Trumpets that set the Holy Day calendar used by the majority of the churches of God. The information here was used to establish the mechanics of the HCC, but disregarded its Hebrew year AM (After Man) and their assumed starting point of Creation; the Creation year being 1 AM.

HCC will be used when directly addressing the material in the $11^{\text {th }}$ edition of the Encyclopedia Britannica.

The purpose for presenting the following study is to show the authority of the Hebrew Calculated Calendar by constructing a progression of time by an unending sequence of seven day Sabbaths, beginning with the Creation week. This will show:

# The weekly Sabbaths coincide with the Hebrew Calculated Calendar <br> The Biblical accounts of Creation <br> The Flood and its' Sabbaths in Genesis 7 <br> The Sabbaths of Exodus 16 <br> The Passover of Joshua 5: 10-12 <br> The building of the First Temple (See article titled: Solomon’s Temple Dedicated 

 on the Jubilee.)
## The destruction of the Second Temple in 70 A.D <br> The Seven-Day Sabbath (Sunset Friday to Sunset Saturday) corresponds with

 the present day Gregorian calendarThis establishes the correlation of the HCC with the Biblical record of the accounts noted, and the fact that the Gregorian Calendar maintains the same weekly cycle which is God's method of keeping time. This is a solid foundation to project all dates through the entire Bible and confirm the validity of the Hebrew Calculated Calendar.

Through further study of the solar calendar, beginning with the creation year, it will be shown that the progression of the seven-day week through the solar years will match the Sabbaths of Genesis 7 and 8 and Exodus 16. The HCC, when brought forward by its nineteen year cycles will also match these Sabbaths, thus adding the mathematical proof that the HCC is the calendar that God employed in the accounts of the bible, making it the only usable calendar for God's people.

## STARTING POINT OF THE DAY

All calendars need a starting point and the question of where to begin must be addressed. A calendar of days requires a starting point of the day. Man measures a 24 -hour period as one day, but God measures one revolution of the earth as one day. This is clearly addressed in Genesis, and the exact moment of the start of Creation week is defined by God in His Word. Gen. 1:2 tells us that the earth is in darkness and that God's Spirit is hovering over the waters. It is the waters in the atmosphere that are preventing light from reaching the earth.

The source of the light had already been created. Job 38:4-7 "Where were you when I laid the foundations of the earth? Tell Me, if you have understanding. Who determined its measurements?

Surely you know! Or who stretched the line upon it? To what were its foundations fastened? Or who laid its cornerstone, when the morning stars sang together, and all the sons of God shouted for joy?" Job points out the joy of the morning stars at the moment of creation, and at a later point in Isa.14:1215 he refers to one as the Son of the Morning - one of the morning stars - as being cut down to the ground - an act of violence. "How you are fallen from heaven, oh Lucifer, son of the morning! How you are cut down to the ground, you who weakened the nations! For you have said in your heart: I will ascend into heaven, (coming from earth) I will exalt my throne (God had already given him a position of authority) above the stars of God; I will sit on the mount of the congregation, on the farthest side of the north; I will ascend above the heights of the clouds, I will be like the Most High. Yet you shall be brought down to Sheol, to the lowest depths of the pit."

Ezek. 28:16 tells of God casting him out of heaven to the earth. This act of violence, (war) was the cause of the earth going into darkness. Gen.1:2"The earth became void and dark." God did two things at this time. He cleared the earth's atmosphere, allowing light to reach it, and started the rotation of the earth which gives us the day. Gen. 1:5 says "God called the light Day, and the darkness He called Night. So the evening and the morning were the first day."

The first half of this verse calls out the morning first and then the evening. The latter half defines the first day as beginning with the evening. The starting and ending point of the day is almost simultaneous; as one day ends the next begins.

In the following verses God repeats this statement: "The evening and the morning" five times! This confirms the day's intersecting points coming at the end of the day (evening.)

To understand how this term "evening" is used as regarding the day's end, and how it is Biblically determined, look at the following scriptures: Josh.8:29, "And the king of Ai he hanged on a tree until evening. And as soon as the sun was down Joshua commanded that they should take the corpse down from the tree." Josh 10:26, "And after Joshua struck them and killed them, and hanged them on five trees; and they were hanging on the trees until evening. So it was at the time of the going down of the sun that Joshua commanded and they took them down from the trees."
It can be seen by these scriptures that evening, and the going down of the sun is synonymous. It is plain that Joshua considered this to be the end of the day.

In $2^{\text {nd }}$ Samuel 3:35 David also considered the going down of the sun as the day's end. ${ }^{\text {st }}$ Kings 22:3536 and $2^{\text {nd }}$ Chron. 18:34 both depict sunset as the end of the day. In Deut. 24:15 God says, "Each day you shall give him his wages, and not let the sun go down on it." This is the legal definition for payment of wages by the days- end.

Finally and most significant is the prophecies of Daniel 8:13-14, 26 where these prophetic days are pointedly stated as "evenings and mornings."

This is confirmed in the New Testament by the Gospel writers. Mark 1:32, and Luke 4:40: "Now when the sun was setting..." In Eph. 4:26 Paul writes, "Be angry and do not sin; do not let the sun go down on your wrath." As these scriptural references point out the day ends at sunset. Therefore, the next day begins at the same time.

When did God start His clock? Genesis 1:14-19, "Then God said, 'Let there be lights in the firmament of the heavens to divide the day from the night; and let them be for signs and seasons, and for days and
years; and let them be for lights in the firmament of the heavens to give light on the earth; and it was so.' God made two great lights; the greater light to rule the day, and the lesser light to rule the night. He made the stars also. God set them in the firmament of the heavens to give light on the earth, and to rule over the day and over the night, and to divide the light from the darkness. And God saw that it was good. So the evening and the morning were the fourth day."

It is here that God names the instruments that He has created for man to keep track of time. He also delineates their function.

As previously shown, these bodies had been created prior to Day One of the present Creation. It was on the fourth day that God adjusted their motions so that Day One would be accurately placed as the starting point of their movements. This is shown on the calendars being presented in this article, beginning with Creation and ending with the present day.
It will be shown in the following calendars that they are tied together by the unbreakable chain of seven day weeks, beginning with Creation and going forward to the present time.

Once it is understood that God's day ends at the going down of the sun, there would be only one point on earth, the Creation site, which would be 24 hours in length for Day One of creation. This can be easily understood by thinking of a point on earth opposite that of the Creation site - the Garden of Eden. At that point it would have been about 6 PM there, meaning that the first day of Creation on the opposite side could only contain twelve hours. When 6 AM was reached on creation day in the Garden, Day Two was started on the opposite the side of the world. This explains why our brethren in Australia are keeping the Sabbath day before those in the U.S. or Canada.

## GOD'S CLOCK

There is a basic principle that needs to be acknowledged; it is that God set the heavenly orbs as a giant clock, making the universe operate as a whole. Genesis 1:14, "Then God said, 'Let there be lights in the firmament of the heavens to divide the day from the night; and let them be for signs and seasons, and for days and years; '" The sun is for days and years, the moon for seasons - holy days, festive gatherings, appointments and signals.

An important point to recognize is that the beginning and ending points of the solar year do not coincide with that of the moon's cycles. The day, which is set by the sun, gives us the connecting points between the two: but they never start or end their cycles at the same time with the exception of the creation year when God gave them their initial start. An example of their misalignment is seen in the year of the flood in which the solar year begins ten days behind the first day of the moon's cycle, and ends ten days before the start of the next HCC year. This is confirmed in the calendar generator, found at www.biblicalcalendarproof.com, for BC 2386 shown below, which shows the Sabbath progression for the year of the flood -1660-1661 AM.


It must be recognized that the functioning parts of a clock cannot be changed without falsifying its historical record. Man-made mechanical clocks can be stopped, set ahead or back, but its working elements cannot be changed without the clock producing a time unrelated and historically inaccurate. God's time clock is no different. At the conclusion of this study it will be shown that the seven-day solar calendar, the HCC and the Gregorian calendar perfectly agree on which day of the week is the seventh.

In fact God did stop His clock when He gave Joshua a long day to complete his battle (Josh. 10:12-13). He also set time back by 15 degrees for King Hezekiah (II Kings 20:9-11). In both of these cases the day element was not changed: the hours within the day changed as man keeps time, not the day count. Remember, it is the revolution of the earth that makes up a day, not the man-made passage of hours.

Historical, accurate accounts are important in establishing Biblical truths, such as the date of Christ’s Wednesday Crucifixion, a prophetic fulfillment established through calculation. The Bible is an historical record. A point worth noting is that there is no historical record utilizing the visual sighting of the moon to establish a calendar, because there is no historical record of its sightings. Because of this it is impossible to go back and determine when Biblical events occurred based on when the moon was sighted. Also, there is no historical record of when or where the moon was to be sighted. If it is said that the HCC can be used for determining dates, then it must be accepted as accurate and should be used for setting the present Holy Days. It has been pointed out that modern astronomers can calculate when the moon should have appeared, but that is not a visual sighting. It therefore, has no standing as a historical sighting by the human eye at the supposed time of its occurrence.

An example of the kind of change that God's clock shows is found in the rotation of the earth. In this rotation astronomers have noted that one second is lost every ten years, amounting to a loss of ten minutes in six thousand years. The rotation of the earth around the sun changes at the rate of ten seconds every 2,000 years. The accumulated time would be 30 seconds in 6,000 years. These small amounts of change would not affect a calendar based on whole days and years. Showing this change
establishes the consistency of God's clock when measured by man. God is the one who sets the standard by which Biblical time is measured. It then should be recognized as errorless. One rotation of the earth is a day, and one cycle of the earth about the sun is one year. END OF DISCUSSION!

This means that the solar year can now be figured on the present 365.25 day-year, with an 11.232 minute shortfall. Thus we have a leap year every four years and a minus of one day every one hundred and twenty-eight years. Multiplying 11.232 times 128 equals 23.9616 hours and gives us the reason for not taking a leap day at the end of this period of time. If you use 129 years you would have 11.232 times 129 equals 24.1488 hours: this being greater than the day of subtraction. The 128 year cycle was chosen because it is a multiple of four, thus simplifying the mathematics. In addition, if this error of . 0384 were calculated, it would amount to 1.8 hours in 6,000 years: a negligible amount.

## HOW THE SOLAR CALENDAR IS ESTABLISHED (Chart \#3)

Looking at the Creation year, which places the first Sabbath on the seventh day, you will find the last Sabbath to fall on day three hundred sixty-four. This means that the first Sabbath of the second year will fall on the sixth calendar day, and the last one on the three hundred and sixty-third day. The third year will have its first Sabbath on the fifth day of that year. The last Sabbath will be on day three hundred and sixty-two.

Chart \#2 showing the basis for starting Chart \#3
Year One

| 7 | 14 | 21 | 28 | 35 | 42 | 49 | 56 | 63 | 70 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 77 | 84 | 91 | 98 | 105 | 112 | 119 | 126 | 133 | 140 |
| 147 | 154 | 161 | 168 | 175 | 182 | 189 | 196 | 203 | 210 |
| 217 | 224 | 231 | 238 | 245 | 252 | 259 | 266 | 273 | 280 |
| 287 | 294 | 301 | 308 | 315 | 322 | 329 | 336 | 343 | 350 |
| 357 | 364 |  |  |  |  |  |  |  |  |

*One day, carryover to start $2^{\text {nd }}$ year.
Year Two

| 6 | 13 | 20 | 27 | 34 | 41 | 48 | 55 | 62 | 69 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 76 | 83 | 90 | 97 | 104 | 111 | 118 | 125 | 132 | 139 |
| 146 | 153 | 160 | 167 | 174 | 181 | 188 | 195 | 202 | 209 |
| 216 | 223 | 230 | 237 | 244 | 251 | 258 | 265 | 272 | 279 |
| 286 | 293 | 300 | 307 | 314 | 321 | 228 | 335 | 342 | 349 |
| 356 | 363 |  |  |  |  |  |  |  |  |

*Two day, carryover to start $3^{\text {rd }}$ year.
Year Three

| 5 | 12 | 19 | 26 | 33 | 40 | 47 | 54 | 61 | 68 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 75 | 82 | 89 | 96 | 103 | 110 | 117 | 124 | 131 | 138 |
| 145 | 152 | 159 | 166 | 173 | 180 | 187 | 194 | 201 | 208 |


| 215 | 222 | 229 | 236 | 243 | 250 | 257 | 264 | 271 | 278 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 285 | 292 | 299 | 306 | 313 | 320 | 327 | 334 | 341 | 348 |
| 355 | 362 |  |  |  |  |  |  |  |  |

*Three day, carryover to $4^{\text {th }}$ year.

## Year Four

| 4 | 11 | 18 | 25 | 32 | 39 | 46 | 53 | 60 | 67 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 74 | 81 | 88 | 95 | 102 | 109 | 116 | 123 | 130 | 137 |
| 144 | 151 | 158 | 165 | 172 | 179 | 186 | 193 | 200 | 207 |
| 214 | 221 | 228 | 235 | 242 | 249 | 256 | 263 | 270 | 277 |
| 284 | 291 | 298 | 305 | 312 | 319 | 326 | 333 | 340 | 347 |
| 354 | 361 |  |  |  |  |  |  |  |  |

*Because this is a leap year there is a five day carryover to start $5^{\text {th }}$ year.
Year Five

| 2 | 9 | 16 | 23 | 30 | 37 | 44 | 51 | 58 | 65 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 72 | 79 | 86 | 93 | 100 | 107 | 114 | 121 | 128 | 135 |
| 142 | 149 | 156 | 163 | 170 | 177 | 184 | 191 | 198 | 205 |
| 212 | 219 | 226 | 233 | 240 | 247 | 254 | 261 | 268 | 275 |
| 282 | 289 | 296 | 303 | 310 | 317 | 324 | 331 | 338 | 345 |
| 352 | 359 |  |  |  |  |  |  |  |  |

Six day, carryover to start $6^{\text {th }}$ year.
Year Six

| 1 | 8 | 15 | 22 | 29 | 36 | 43 | 50 | 57 | 64 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 71 | 78 | 85 | 92 | 99 | 106 | 113 | 120 | 127 | 134 |
| 141 | 148 | 155 | 162 | 169 | 176 | 183 | 190 | 197 | 204 |
| 211 | 218 | 225 | 232 | 239 | 246 | 253 | 260 | 267 | 274 |
| 281 | 288 | 295 | 302 | 309 | 316 | 323 | 330 | 337 | 344 |
| 351 | 358 | 365 |  |  |  |  |  |  |  |

*No carry over, start with year one.

## Year Seven

Count the same as first year with one day carryover to start year 8.

## Year Eight

Count the same as second year with carryover of three days to start the $9^{\text {th }}$ year. Three day carryover is due to the leap year.

## Year Nine

Count the same as fourth year with a four day carryover to year 10 .

## Year Ten

| 3 | 10 | 17 | 24 | 31 | 38 | 45 | 52 | 59 | 66 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 73 | 80 | 87 | 94 | 101 | 108 | 115 | 122 | 129 | 136 |


| 143 | 150 | 157 | 164 | 171 | 178 | 185 | 192 | 199 | 206 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 213 | 220 | 227 | 234 | 241 | 248 | 255 | 262 | 269 | 276 |
| 283 | 290 | 297 | 304 | 311 | 318 | 325 | 332 | 339 | 346 |
| 353 | 360 |  |  |  |  |  |  |  |  |

* Five day carryover to start year 11

When this progression is carried forward with a leap year every four years, you will find there are seven unique types of years which repeat themselves every twenty-eight years. There are no other possible year types. At the end of one hundred and twenty-eight years a day must be subtracted which starts a new pattern. This continues through seven cycles of one hundred and twenty-eight years equaling 896 years. At this point the solar calendar repeats itself, beginning the same as the first year of Creation.

Utilizing this information, (Chart\#3 available on the web site, with a sample on page 8,) beginning with year one and progressing through six thousand years. Each type of year (seven total) shows its peculiarity by the days that remain after the last Sabbath of that year. They are as follows:

Type \#1 has a one day carry over. Example: 365 divided by 7 results in 52 Sabbaths plus a remainder of 1 day.

The "type numbers" are arbitrarily assigned to different years in the first ten years of man's existence. This provides a different type number based on how many days remain in the year after the last Sabbath of that year - so called "carry over" days.

Type \#1 has one day carryover
Type \#2 has two days carry over
Type \#3 has three days carry over
Type \#4 has four days carry over
Type \#5 has six days carry over
Type \#6 has zero days carry over
Type \#10 has five days carry over
When these types of years fall in a leap year one day must be added, which changes it to the next year type. It should be noted that the solar calendar as constructed here is not the same as the Gregorian calendar presently used.

## EXPLANATION OF EXPANDED CHART \#3

Utilizing this information, chart \#3 has been constructed as follows: The first column is the passage of time from creation in years. The second column is the length of the solar year in days. The third column is the number of days carried over from that year to establish the first Sabbath of the next year. The fourth is the type of year which represents the fixed number of days to be carried over. The fifth column is the AM day for the first Sabbath of that year. The sixth column shows the difference in days between the HCC year and the Solar year. The seventh column is blank and not shown, and the eighth column has the first Sabbath of the Gregorian year. The ninth has the mating year BC or AD to the AM year.

Chart \#3

| year | days | DCO | Type AM S | Gor. S Gor $\mathbf{Y r}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{1}$ | 365 | $\mathbf{1}$ | $\mathbf{1}$ | $\mathbf{7}$ | -11 | 1 | 4046 |
| 2 | 365 | 2 | 2 | 6 | -21 | 7 | 4045 |
| 3 | 365 | 3 | 3 | 5 | -1 | 5 | 4044 |
| 4 | 366 | 5 | 10 | 4 | -13 | 4 | 4043 |
| 5 | 365 | 6 | 5 | 2 | -25 | 3 | 4042 |
| 6 | 365 | 0 | 6 | 1 | -5 | 2 | 4041 |
| 7 | 365 | 1 | 1 | 7 | -16 | 7 | 4040 |
| 8 | 366 | 3 | 3 | 6 | 1 | 6 | 4039 |
| 9 | 365 | 4 | 4 | 4 | -9 | 5 | 4038 |
| 10 | 365 | 5 | 10 | 3 | -20 | 4 | 4037 |
| 11 | 365 | 6 | 5 | 2 | 0 | 2 | 4036 |
| 12 | 366 | 1 | 1 | 1 | -13 | 1 | 4035 |
| 13 | 365 | 2 | 2 | 6 | -23 | 7 | 4034 |
| 14 | 365 | 3 | 3 | 5 | -4 | 6 | 4034 |
| 15 | 365 | 4 | 4 | 4 | -14 | 4 | 4032 |
| 16 | 366 | 6 | 5 | 3 | -27 | 3 | 4031 |
| 17 | 365 | 0 | 6 | 1 | -8 | 2 | 4030 |
| 18 | 365 | 1 | 1 | 7 | -18 | 1 | 4029 |
| 19 | 1 | 365 | 2 | 2 | 6 | 0 | 6 |

The unique thing about this solar calendar is that it is not disputable. It marches forward through all the time that man has lived upon the earth in increments of seven days. Therefore, it can be said without equivocation that this is the only possible calendar that can represent the Bible's passage of time. Any calendar that agrees with this calendar would be correct. The corollary is that any calendar disagreeing with this one is in error. It will be shown that the Biblical accounts of the Creation, the Flood, the Exodus and Joshua 5's Passover, when correctly understood and dated, align themselves with this solar calendar.

Chart \#3 also gives the beginning Sabbath, plus the first Sabbath of the Gregorian BC or AD year. There is a calendar generator that can be found on www.biblicalcalendarproof.com showing these dates for any year. They are fully explained and documented when the calendars for our present dating are presented.

## USING CHART 3

When the year 3101 AM is taken as an example, it is necessary to look up the year 3100 AM on the website to establish the starting Sabbath for that year. Chart \# 3 shows this is a leap year having 366 days, with a one day carryover, placing the last day of 3100 on a Sunday. This means the first Sabbath of 3101 is on the $6^{\text {th }}$ day of its first week. The Sabbaths for 3101 will be on the $6^{\text {th }}, 13^{\text {th }}, 20^{\text {th }}$, etc. days of that year. All the solar calendars shown in this presentation will have their Sabbaths shown in blue.

In addition, there are three pillars shown - the HCC agreeing with the Biblical accounts of the solar and Gregorian calendars - making it the only accurate and dependable calendar for fixing the Holy Days for God's people.

## POSTPONEMENTS EXPLAINED

In order to produce a calendar that shows the correct relationship of days within the HCC year, it is necessary to understand how the postponements are/were used. The postponements as given to us by the Jewish authorities are a series of complicated rules to be applied making it difficult for the average person to understand. This mystery is easily resolved when recognizing that their sole purpose is to keep the moon's cycles in conjunction with the solar year at the end of each 19-year period. As the expanded chart \#3, found as a computerized, printable chart of 67 pages at the end of this article clearly demonstrates, the first Sabbath day of the solar, and the corresponding first Sabbath day of the Gregorian calendar are shown from Creation to beyond our present day. Therefore these rules are no longer necessary. The only function of these rules is that they allowed the establishment of an accurate calendar without knowing the beginning point. These rules can be explained by knowing that the first day of the seventh month (Tisri) was set by the following: The first of Tisri can never fall on a day of the week that is a Sunday, Wednesday, or Friday. With this in mind two simple charts can be constructed reflecting these rules.

The average lunar cycle has 29.53059 days in a month. Therefore, in twelve months it is only 354.36 days long. This is about 11 days short of the solar year of 365.24 days, making it necessary to add an additional month seven times in a 19-year solar cycle. This also regulates the number of days per year. The only purpose is to keep the Hebrew calculated calendar aligned to the moon's cycle of 19 solar years. This results in six year types which are: 3 twelve-month year lengths of 353, 354, and 355 days; plus 3 thirteen-month years of 383,384 , and 385 days. The 13 -month long years are the $3^{\text {rd }}, 6^{\text {th }}, 8^{\text {th }}$, $11^{\text {th }}, 14^{\text {th }}, 17^{\text {th }}$ and $19^{\text {th }}$ years of the 19 -year cycle.

## SHORT AND LONG YEAR CHARTS EXPLAINED

When combining these year lengths with the limitation of the usable days of the week, two types of charts result showing which combination of weekly starting days and year lengths can be used. Chart \#7 and Chart \#8 show what combinations are acceptable and which ones cannot be used. These charts are titled "short years" and "long years" in the Hebrew calculated calendar. Remember, this is historical information showing what had to happen to achieve an accurate calendar without the use of a continuous calendar that began at Creation.

The top line of Chart \#7, on page 11, beginning at the left has either an OK or NG in red, declaring whether that year can be used or not. This is followed by the year length in days. The last heading is for the length of the month in days. It has the seventh month- Tisri - in red. At the bottom of this column is "30Nisan" which is the 30 day length of the first month Nisan of the next year. The far left column numbers the months in that year. The second horizontal line from the top are the weeks of the month in blue, and the columns under the weeks are the day numbers on which the Sabbaths fall for each month. The determination of the year is based on an acceptable day for the first of Tisri not being a Sunday, Wednesday or Friday. These charts show all the possible combinations that exist, and each chart also contains an explanation of why certain year lengths cannot be used. Because Chart \#3 begins at the Creation week, and moves forward in unbroken sequence of time, showing increments of seven-day weeks, it is not dependent on the postponements. What it does prove is that the postponements were correctly used, and always agree with Chart \#3.

## E. H. LINDO'S CALENDAR

On page 13 is a sample of Chart \#5 showing the first of Tisri by years in the Gregorian calendar which is being used at the present time, to establish the Holy Days that are presently observed. It was constructed by E.H. Lindo in 1838 and appears in the $11^{\text {th }}$ edition of Britannica, used here. The first column has the number of years from Creation according to the Jewish belief. Column 3 and 4 show the corresponding present Georgian dates. As these dates are a product of a 247 -year cycle, composed of thirteen 19-year cycles, it can be determined which cycle the Rabins believe to be that of Creation. Dividing 247 into one of the Jewish years of Chart \#5 will result in a whole number, and this will establish their cycle of creation. The Jewish year 5681 when divided by 247 gives the whole number 23, the last year of Lindo’s cycle 299. This makes the first year of cycle 300 the Jewish Creation year. Looking at chart \#5, this Jewish year 1 has the first of Tisri on Saturday, making Monday as the first day of Creation. Obviously this does not agree with the Biblical narrative found in Genesis 1, and is confirmed by looking at Chart 7 on page 11, which shows that when the $1^{\text {st }}$ of Tisri is a Monday, the $1^{\text {st }}$ day of the first month is a Saturday. This is contrary to Genesis 1 which shows the first day of Creation to be a Sunday.

| Short Years in Hebrew Calendar Calculations |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year Type |  | OK | YR3 |  |  | Lng of Mo | NG | Yr 35 |  |  |  | Lng of Mo | Ok |  |  |  |  | Lng of Mo |
| Month | 1 | 2 | 3 | 4 | 5 |  | 1 | 2 |  | 4 | 5 |  | 1 | 2 | 3 | 4 | 5 |  |
| 1 | 1 | 8 | 15 | 22 | 29 | 30 | The 4-11-18 Sabbaths of Nisian would result in the first day of Tisri falling on a Friday. This cycle cannot be used. |  |  |  |  |  |  |  |  |  |  |  |
| 2 | 6 | 13 | 20 | 27 |  | 29 |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 | 5 | 12 | 19 | 26 |  | 30 |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 | 3 | 10 | 17 | 24 |  | 29 |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | 2 | 9 | 16 | 23 | 30 | 30 |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 | 7 | 14 | 21 | 28 |  | 29 |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 | 6 | 13 | 20 | 27 |  | Mon 30t |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 | 4 | 11 | 18 | 25 |  | 29 | 4 | 11 | 18 | 25 |  | 29 | 4 | 11 | 18 | 25 |  | 30 |
| 9 | 3 | 10 | 17 | 24 |  | 29 | 3 | 10 | 17 | 24 |  | 30 | 2 | 9 | 16 | 23 | 30 | 30 |
| 10 | 2 | 9 | 16 | 23 |  | 29 | 1 | 8 | 15 | 22 | 29 | 29 | 7 | 14 | 21 | 28 |  | 29 |
| 11 | 1 | 8 | 15 | 22 | 29 | 30 | 7 | 14 | 21 | 28 |  | 30 | 6 | 13 | 20 | 27 |  | 30 |
| 12 | 6 | 13 | 20 | 27 |  | 29 | 5 | 12 | 19 | 26 |  | 29 | 4 | 11 | 18 | 25 |  | 29 |
|  | 5 | 12 | 19 | 26 |  | 30 nis | 4 | 11 | 18 | 25 |  | 30 n is | 3 | 10 | 17 | 24 |  | 30 nis |
| Sabbaths |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Short Yr |  |  |  |  |  |  | Med Yr |  |  |  |  |  | Long Yr |  |  |  |  |  |

## WHAT WAS THE BEGINNING MONTH OF CREATION?

The Jewish tradition places Creation in the seventh month (Tisri) contrary to God's instruction in Exodus 12:1-2, "And the Lord spoke to Moses and Aaron in the land of Egypt saying,' This month shall be your beginning of months; it shall be the first month of the year to you.'"

Verse 1 makes this statement a "thus saith the Lord" and it must be considered as strong a statement as scripture can make. This is the only statement in the Bible prescribing when to start the calendar year! Men who wish to reconcile the explicit scriptural statement of Ex. 12:1-2 with the Jewish tradition
reason (among other possible reasons) that God had to create the earth in the fall harvest season so that there might be food to eat until the next harvest. This ignores the possibility that the climate where the garden was located had the ability to provide year round sustenance. Then to reconcile this Jewish tradition with Ex. 12:2 they say the wording "...it shall be the first month of the year to you" means that:
a. God is making a change just for the Israelites.

This conveniently ignores that the wording as easily would support the idea that: -
b. God was designating the correct understanding of His calendar in contrast to a variety of pagan calendars which may have started at a variety of times.

Both of these understandings of the wording are purely speculation of men, just as the Jewish tradition of a fall Creation is. Are we to use human speculation rather than the scriptural statement?

However, what is clear is that God had to inform Moses and Aaron what the starting month of the year would be and that is what He wanted them to use. Ex. 12:2 is established scripture and is the only specification for the starting month of the year as prescribed by God.

Because of this Jewish tradition it is assumed that God made a correction in His calendar, changing the beginning of the year, Tisri, to the first month Nisan. The correct understanding of Ex. 12:2 is that God was either informing Moses of something that Moses did not know, or correcting his misconception of the starting month of the year. It is interesting to note that God gave Moses only this one piece of information to construct His calendar, meaning that Moses already knew the intricacies of God's calendar but needed the starting month.

It also shows that Moses had the correct progression of days for the calendar, and that the calendar had to be calculated. Remember, Moses was not in Jerusalem to sight the moon. Therefore he had to calculate the days. This shows God's stamp of approval of a mathematically determined calendar.

If God did not use this calendar at Creation, then He changed it! Would God change it so easily? Consider the mass of scripture that testifies to God’s unchanging nature.

God does not make mistakes! His calendar was set from Creation and has never changed! Malachi 3:6, "For I am the Lord, I do not change." Hebrews 6:17-18, "Thus God, determining to show more abundantly to the heirs of promise, the immobility of His counsel, confirmed by it by an oath, that by two immutable things, in which it is impossible for God to lie, we might have strong consolation, who have fled for refuge to lay hold of the hope set before us." Hebrews 13:8, "Jesus Christ is the same yesterday, today, and forever." James 1:17, "Every good gift and every perfect gift is from above, and comes down from the Father of lights, with whom there is no variation or shadow of turning."

Jer.33:20-21, "Thus says the Lord: 'If you can break my covenant with the day and my covenant with the night, so that there will not be day and night in their season, then my covenant may also be broken with David my servant, so that he shall not have a son to reign on his throne, and with the Levites, the priests, my ministers.'"

If God had made a change in His calendar it would have been analogous to lying by the falsification of the passage of time. In addition, the Creation year can be determined by examining the HCC. (Chart \# 5, and chart \#7 on page 13). Chart \#5 shows the first day of Tisri - the Feast of Trumpets - in Gregorian dates, as is presently observed. Cycle numbers were assigned by its originator at the start of each 19-year period.

## EXPLANATION OF CHART \#5

In chart \#5 it is seen that I have taken the liberty of adding a set of red numbers - one thru 13 - next to the number the originator, E.H. Lindo, has used, designating the correct starting order beginning with Creation. On the web site the three boxes above this line designate the information in the columns below. Number one is for cycle 298, number 2 for cycle 299, etc. The total number of days in each 19year period follows the cycle number. The top line of information designates the content of the column below it, such as the Jewish year, number of days, and commencement of the first of day of Tisri. In addition a series of red AM (After Man) dates are found at important junctures of Bible history. These are the AM years for Creation, the Flood, the Exodus, and the Passover of Joshua 5. These dates will be established by calendars showing their respective places in the progression of time. Also, a yellow highlight was added to the dates that would result in the following year having the $14^{\text {th }}$ of Nisan occurring on a Wednesday, which is the weekday of Christ's Crucifixion and the first Passover of Exodus 12. This shows that when the Feast of Trumpets falls on a Saturday, Passover for that year would fall on a Wednesday.

| \#1-/298Cycles/Creation-6939 Day |  |  |  |
| :---: | :---: | :---: | :---: |
| 5644 | 354 | Tues. | 2 Oct. 1883 |
| 45 | 355 | Sat. | 20 Sept. 1884 |
| 46 | 385 | Thur. | 10 Sept. 1885 |
| 47 | 354 | Thur. | 30 Sept. 1886 |
| 48 | 353 | Mon. | 19 Sept. 1887 |
| 49 | 385 | Thur. | 6 Sept. 1888 |
| 50 | 354 | Thur. | 26 Sept. 1889 |
| 51 | 383 | Mon. | 15 Sept. 1890 |
| 52 | 355 | Sat. | 3 Oct. 1891 |
| 53 | 354 | Thur. | 22 Sept. 1892 |
| 54 | 385 | Mon. | 11 Sept. 1893 |
| 55 | 353 | Mon. | 1 Oct. 1894 |
| 56 | 355 | Thur. | 19 Sept. 1895 |
| 57 | 384 | Tues. | 8 Sept. 1896 |
| 58 | 355 | Mon. | 27 Sept. 1897 |
| 59 | 353 | Sat. | 17 Sept. 1898 |
| 60 | 384 | Tues. | 5 Sept. 1899 |
| 61 | 355 | Mon. | 24 Sept. 1900 |
| 62 | 383 | Sat | 14 Sept. 1901 |

As the Bible clearly shows in Genesis 1, the Creation week began on Day One - Sunday, and ended on the seventh day - Saturday. If a cycle has the first month - with this sequence of days, then it would qualify as the beginning year of Creation.

The fact that we are looking at a repetitive cycle of 247 years means that any point in that 247 years could, in theory be used as a starting day. There are two limiting factors that must be met to achieve the correct starting day. First it must have a Sunday as the first day of the first year. Secondly, it must result in the placing of the year of the Flood in a year having the correct number of days, 385, and having the correct Sabbath days of the tenth and seventeenth of the second month of that year within the range of years that meet the Bible's time frame.

Cycle \#298 of Chart \#5 above has the first of Tisri falling on a Tuesday with a year length of 354 days, which is the nominal year length for a twelve month year. The Fourth page of Chart \#7 on page 14 shows that a Tuesday start for Tisri has the seventh day of the first month, Nisan, as a Sabbath. This qualifies cycle 298 as the first cycle representing the Creation year, which has been renumbered as one. In addition, it has only one length of year that the postponement rules allow - chart \#7, page 14-354 days.

| Short Years in Hebrew Calendar Calculations Chart 7 Page 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year Type \#7 |  | $\begin{array}{\|r\|} \hline N G \\ \hline \end{array}$ | YR 353 |  | Lng of Mo |  | OK | Yr 354 |  |  | Lng of Mo |  | NG | Yr 355 |  |  | Lng of Mo |  |
|  | 1 |  | 3 | 4 | 5 |  |  | 2 | 3 | 4 | 5 |  |  | 2 | 3 | 4 | 5 |  |
| 1 | 7 | 14 | 21 | 28 |  | 30 |  | The short year of 353 days and the long year of 355 days are not usable because, the short year results in a 4-11-18 Nisian beginning, resulting in a Friday for the first day of Tisri. The long year gives a 2-9-16 Nisian beginning, resulting in a Sunday for the first day of Tisri. |  |  |  |  |  |  |  |  |  |  |
| 2 | 5 | 12 | 19 | 26 |  | 29 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 | 4 | 11 | 18 | 25 |  | 30 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 | 2 | 9 | 16 | 23 |  | 29 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | 1 | 8 | 15 | 22 | 29 | 30 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 | 6 | 13 | 20 | 27 |  | 29 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 | 5 | 12 | 19 | 26 |  | Tue 30 t |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 | 3 | 10 | 17 | 24 |  | 29 | 3 | 10 | 17 | 24 |  | 29 | 3 | 10 | 17 | 24 |  | 30 |
| 9 | 2 | 9 | 16 | 23 |  | 29 | 2 | 9 | 16 | 23 | 30 | 30 | 1 | 8 | 15 | 22 | 29 | 30 |
| 10 | 1 | 8 | 15 | 22 | 29 | 29 | 7 | 14 | 21 | 28 |  | 29 | 6 | 13 | 20 | 27 |  | 29 |
| 11 | 7 | 14 | 21 | 28 |  | 30 | 6 | 13 | 20 | 27 |  | 30 | 5 | 12 | 19 | 26 |  | 30 |
| 12 | 5 | 12 | 19 | 26 |  | 29 | 4 | 11 | 18 | 25 |  | 29 | 3 | 10 | 17 | 24 |  | 29 |
|  | 4 | 11 | 18 | 25 |  | 30nis | 3 | 10 | 17 | 24 |  | 30nis | 2 | 9 | 16 | 23 | 30 | 30nis |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Short Yr |  |  |  |  |  |  | Med Yr |  |  |  |  |  | Long Yr |  |  |  |  |  |
| Notes: |  |  |  |  |  |  |  |  |  |  |  |  | HCC $=$ <br> 30nis <br> $30 \mathrm{t}=$ |  | w Cal |  |  | nder |

Cycle 298 is the only cycle that results in a progression of days matching the weekly Creation cycle for the first month. It is important to know that all 19-year cycles of chart \#5 are repetitive, and their position within the 247-year period are fixed and never move. The Hebrew calendar of 19-year and 247-year cycles is a result of a mathematical formula that accurately predicts the lunation's as they occur in the present calendar. In a solar-lunar calendar the 19-year cycle almost equals the time for 19 orbits of the earth about the sun. By placing the start of Tisri on the prescribed days, 2-3-5-7 of the week, and applying the correct year lengths which are totals of 6939-6940-6941 days, a comparison
can be made to the Solar calendar year lengths for the same period of time. The red figures of Chart \#5 on the website show these numbers.

It is an extremely important fact that only one of the thirteen cycles can be used as a starting point that exactly duplicates the Creation week in the first month, Nisan. In turn this leaves only one possibility for the alignment of the calendars. The mathematical feasibility for this to happen is improbable to the extreme, yet it will be shown to be an unbroken succession of lunar solar cycles accurate to the present day.

## TOTAL DAYS OF HCC'S AND SC'S EXPLAINED - Chart \#6

The mechanics of the HCC has two basic time sequences which work together. They are the 19-year cycle (the conjunction of the sun, moon and earth,) and the 247-year cycle, which is the sum of 13 of these 19 -year cycles. The 247 -year cycle is repetitive and never changes its total number of days. In addition, each of the thirteen-19 year cycles has its own fixed number of days and they follow a fixed sequence within the 247 year cycle. Thus, the 247 years are always 90216 days long. In contrast, the solar calendar varies in the number of days and its repetitive location to the HCC. This can be seen in chart \#6 on page 15. This chart gives the running account of the 2.0844 hours that the HCC is longer than the seven day SC (solar calendar over a nineteen-year period.) The HCC is in whole days. This accounts for the discrepancy of the multiple of 2.0844, which is sometimes greater or smaller than whole days. The last page of Chart \#6 shows a total error of only 1.78 days in 6,175 years.



Chart \#6 above shows these discrepancies. It also shows the ending of each 19-year cycle and the corresponding lag time to the Seven Day SC. The number of days in the HCC will become less and less as the years progress to the present age as measured in solar years. The chart shows that at the end of year 6175 AM there is a 30 day difference between the two. It is this shift that keeps the HCC in the
moon's cycle, so that God's Holy Days, like the First Day of the Feast of Tabernacles, falls on a full moon. Ps. 81:3, "Blow the trumpet at the time of the new moon, at the full moon, on our solemn feast day."

The figure 2.0844 hours is arrived at by the following: the 19 years of the HCC is exactly 235 months of the average 29.53059 days per month. Converting this to hours there are 166552.5276 hours per nineteen years. The solar calendar in 19 years has an average month of 29.53056 days. Converting this to hours there are l66550.4432 hours. The difference between these two hourly figures is 2.0844 . The source of this information is the $11^{\text {th }}$ edition of the Encyclopedia Britannica.

Without understanding how the two calendars record time relative to one another, it would be impossible to reconcile Biblical accounts, because the Bible uses a combination of solar and lunar measurements of time. An example is the year of the Flood, which was measured in lunar time, and the years of life of the patriarchs measured in solar years.

Chart \#6, page 15 gives a side by side reckoning account of the two calendars. The first column is the numbered sequence of the 19-year cycle. The second column is the year from Creation designated as AM - After Man. The third column is the number of days in that cycle. These totals were taken from the HCC chart \#5. They are the addition of the number of days in each year of the individual cycle.

The forth column is a running total of the difference in the days between the HCC and the seven day solar calendar, and is designated as Lag. The fifth column is the total number of days in the solar calendar as computed from the seven-day SC chart \#3. This sixth column shows the location of the $128^{\text {th }}$ year within the corresponding 19-year cycle. This is repeated at every juncture of 128 years.

## CORRELATION OF THE SEVEN DAY SC AND HCC FOR CREATION - Chart \#9

By making a type of calendar showing a progression of Sabbaths as given in Chart \#3 on the website, and then placing the Sabbaths that result from the HCC's positioning of the first day of Tisri within a given day of the week as shown in Chart \#5, also found on the web site, it will be confirmed that the two calendars follow the same placing of the Sabbaths within the yearly cycle. This calendar is shown as Chart \#9, page 17 and is composed of the following: a small box on the left side showing the days of the week in blue - Sunday, Monday, etc. To the left of this line is the year number from Creation; the year of Creation being \#1 AM. Below them is the corresponding day of Creation week, also in blue. Above the days of the week, in red, are the days taken from Charts \#5, giving the first day of Tisri and Chart \#7, page 4, showing the Sabbath rotation of the first month, Nisan. The paragraph found below the box gives the explanation of the larger box to the right. The blue numbers in this box are the Sabbaths of the solar year - the seven day SC. The red numbers are the Sabbaths of the HCC year. The red numbers above the Sabbath days are the length in days of each Hebrew month. The second calendar is shown on page 17 is taken from the Calendar Generator, and gives the corresponding Gregorian dates in black.

|  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1 | S | M | T | W | T | F | SA |
|  |  |  |  |  |  |  |  |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

The $\mathbf{7}$ day SC is charted in blue and starts with Creation week, year one and continues through the first $\mathbf{2 0}$ years of mans existence (AM). The HCC in red, as found in the 11 edition of Britannica starting with cycle \# 1 or \# 298 [chart \# 5] is directly linked, and found in perfect agreement.
Year one of the SC has $\mathbf{3 6 5}$ days. The HCC has 354 days. The SC will be 11 days advanced at the start of year two. The HCC has a Tuesday start for Tisri. This results in a 7-14-21 Sabbath start for Nisian.
*The Small box gives the end of the previous year and the start of the current year.


The two calendars start out in perfect agreement, but at the end of the first solar year the HCC has fallen behind by 11 days. This is shown by the red 17 over the blue 6 . The solar year has 365 days. The HCC has 12 months; the first month with 30 days, followed by a 29 day month. The total for these months will be 354 days. 365 minus 354 equal 11 days, found in the white square on the bottom four lines of the calendar. The expanded chart \#3 shows this same eleven-day difference. The Gregorian Sabbaths are placed as a result of the seven day sequence it uses. The proof of this placing will be addressed at a later point in this presentation.

If Charts \#5 \& \#6 were disregarded, and the description in Genesis 1 was used along with the average length of the moon's cycle of a little longer than 29.5 days, an identical calendar would be produced. It would place the first of Tisri on a Tuesday of the seventh month, showing that God's Holy Days were set from Creation.

It should be pointed out that the Sabbath days in red of the HCC are a function of Chart \#5, giving the length of the year and the first day of Tisri. This sets the required Sabbath rotation for that year as found in either Chart \#7 - short years, or Chart \#8 - long years, meaning that the HCC runs
independent of the solar calendar. Yet, it consistently matches every Sabbath of the seven-day SC throughout the 19 years. This is not to be forgotten because it is the first step showing agreement between the seven-day Solar Calendar and the HCC. As previously pointed out, the HCC is longer by 2.084 hours at the end of each 19 years. These calendars are figured in whole days, and therefore would not reflect this fraction of a day over this 19-year time period which is confirmed by Chart \#6, page 1 , as shown on page 15 , showing no lag.

An interesting fact comes to light here. It is commonly believed that one must figure backwards from the following year's month of Tisri to establish the Holy Days of the present year. As this calendar chart shows, the last Sabbath of the first year requires the placement of Tisri's Sabbath in the second year. This disproves the belief that you need to figure backwards to establish the calendar. When considering the many objections to the HCC, such as "the calendar was changed by Hillel II," and that it had other changes resulting from the Babylonian influence during the captivity, it cannot be correct. Yet, going back some 6,000 years to Creation, we find it to be in agreement with the Biblical account in Genesis.

It also shows that the HCC is mirroring the seven-day SC, made up of its seven-day increments, the absolute calendar, and the Biblical account of Creation. Having the two independent calculations agree, and in turn they agree with the Biblical account, is a solid foundation to build on. This is the first of the four Biblical accounts to be established in proving the HCC to be the calendar God has always used.

The twenty calendars of Chart \#9 found on the web page show that every Holy Day was set when the first Sabbath of Creation was reached, and was not dependent on man's physical ability to sight the moon from an unknown physical location. Not only that, the Bible does not specify a location for sighting the new moon, which is critical because from where you sight the moon and when you are to go out to sight it results in a variety of dates. In fact the bible never uses the term "new" or "moon" together, but the translators substituted the term "new moon" for the Hebrew word that means the first of the month. The Theological Word Book of the Old Testament states on page 266, "When Hodesh refers only to the beginning of the month; it is naturally translated "new moon," which is a feast day." Here the translators made an assumption that is clearly proven wrong by the factual computations presented here. The first day of every month is determined by calculation, not by sighting the moon.

The idea of sighting presents many controversies resulting in a number of different calendars. There is no end to the explanations as to how the sighting is to be done, especially when the Bible totally ignores this subject. The Bible gives clear instructions as to what a day is, what a week is, what a month is, and what a year is. There is only one Hebrew calculated calendar with no controversy as to the day, week, month or year.

It would be ludicrous to think that God would place in the hands of unstable, deceitful man His call to assemble on specific days to commemorate His total plan for man. As these twenty years of calendars show, all the Holy Days were pre-ordained from Creation to the present, just as the seven day Sabbaths.

Strangely most of those of God's Ecclesia have little problem accepting the present day that we call Saturday as the true Sabbath of Creation having been preordained. Yet there is controversy about when God's Holy Days occur. As these calendars clearly show, the Holy Days are a function of the placing of that first Sabbath day. The subsequent calendars will cover a period of more than 6,000 years, and
never deviate from the original progression of time, showing that these days were mathematically placed from Creation, and not subject to change.

When considering that E.H.Lindo, without any regard for a cycle that supported a Creation for the month of Nisan, was forced by the rules and mathematics of the moon's cycles to have done so in his Cycle \#298 is plainly showing the hand of God directing the establishment of this calendar.

In addition, The International Standard Bible Encyclopedia, Jan. 1994 printing, page \#305 has the following information showing that the calculated calendar was known to the Jews prior to their captivity.
"We have lately learned from the discovery of a number of ARAM papyri at Syene that there was a colony of Jews there who used a calendar constructed, not from observation, but from calculation based upon a very exact luni-solar cycle (E.B. Knobel," ancient Jewish Calendar Dates in ARAMAIC PAPYRI," Monthly Notices of the Royal Astronomical Society, LXVIII, 334). This cycle is known to us by the name of its supposed discover; Meton is one of 19 years, which is only two hours short of 235 complete months. As this Jewish colony appears to have been founded after Nebuchadnezzar's destruction of Jerusalem by some of the refugees who fled into Egypt with Johanan the son of Kareah (Jer. Chapter 40 through chapter 44), this acquaintance with the Metonic cycle cannot have been due to Babylonian influence. Nor can it have been due to Egyptian, since the Egyptians did not use or require any such cycle, their year being a solar one of 365 days. Indeed no other nation appears to have been aware of it, a generation later, Meton, the Athenian, won immortal fame by announcing it. The evidence of these Syene papyri renders it probable that Meton did not himself discover the cycle but learned it from Jewish sources. (6) The Jewish ritual preexilic. Ever since this date of the Captivity, the 19-year cycle has been used by the Jews, and it gives us the "Golden Number" which is employed in fixing the date of Easter in our own ecclesiastical calendar. Since the $\mathbf{1 9}$ year-cycle has been in use ever since the Captivity, the 49 - year cycle, the Jubilee cannot have been an exilic or postexilic innovation. In this new fact we find the decision of the controversy which has so long divided critics as to whether the ritual legislation of the Jews dated from before or from after their captivity. In determining its antiquity we must begin by considering its relation to Deuteronomy, to which it is evidently subsequent........This comes out most clearly in the legislation concerning the feasts. Other indications though less unequivocal, plead for the same relationship. In the next place the legislation itself gives evidence of the date of its origin, and those data which justify a positive inference point to the Babylonian captivity....It would follow that the legislation of sanctity arose in the second half of the Babylonian captivity, presumably shortly before its close. Kuenen was evidently unaware of the astronomical relations concerned in the ritual legislation and was unable to anticipate the striking discoveries made from the Syene papyri. More recent knowledge has reversed the verdict which he pronounced so confidently. The traditional view, that the Hebrew ritual preceded the Captivity was correct. For the Jubilee, with which the Day of Atonement was bound up, was both the culmination and the completion of the entire ritual, and since the period of the Jubilee as a lunar-solar cycle, was preexilic, the ritual as a system must have been preexilic likewise."

This article proves that at the time of the first destruction of Jerusalem, the Jews were using a system of calculation to set the Holy Days, a system that perfectly mirrors the one presently used.

The numbering of the charts relates to the order in which they were developed and not the order in which they are first needed.

The reader will be best served by comprehending the uses of the charts in the order in which they are first cited in the text.

If done otherwise, most readers will find it very difficult to properly grasp their meaning and significance.

## THE FLOOD CALENDAR ESTABLISHED

As established in the opening writing about the length of the Flood year being 385 days, the additional fact that God speaks to Noah on certain Sabbath days of that year, points to the exact year the Flood occurred. If the HCC is correct then it should show this year's length with these Sabbath days.

One of the years for the Flood generally accepted is1656-AM. This year is established by adding up the years between the births of the nine patriarchs beginning with Adam as given in Gen. 5:1-32, plus the addition of the age of Noah at the time of the flood. In order to accept 1656 as the year of the Flood, all of these men would have had to have been born in the same month of the year; the first month as Adam was. It needs to be realized that the years of life and births as recorded in Gen. 5 are not calendar connected, but simply blocks of time in years of their lives on the earth; meaning that their ages are not equated to calendar years, but to the passage of time from birth to death with the exception being Adam.

| Antediluvian Patriarchs Lived Before Their Sons' Birth |  |  |
| :---: | :---: | :---: |
|  |  | Heb. |
| Adam | Gen. v. . 3 | 130 |
| Seth | ---6. | 105 |
| Enos | ---- 9. | 90 |
| Cainan | --- 12. | 70 |
| Mahalaleel | ---15. | 65 |
| Jared | --- 18. | 162 |
| Enoch | --- 21. | 65 |
| Methuselah | --- 25. | 187 |
| Lamech | --- 28. | 182 |
| Noah, at the flood | Gen. vii.6. | 600 |
| Total before the flood |  | 1656 |

Depending upon the month of their birth, the overall time to the Flood could have been as late as 1664, showing the flood date is found sometime between 1656 and 1664.

Two historical factors must coincide as established from the Flood account. One is that the year must have a length of 385 days and that the Sabbaths of the second month fall on the $10^{\text {th }}$ and $17^{\text {th }}$ days of that month. In addition there is the $17^{\text {th }}$ day of the seventh month - also a Sabbath.

This is confirmed in the $8^{\text {th }}$ chapter, verse 4. "Then the ark rested in the seventh month, the $17^{\text {th }}$ day of the month, on the mountains of Ararat." The ark is said to have rested - \#5117 in Strong's. It is used here in the future tense (kal,) and in the following scriptures it is used in the same tense.

Ex. 20:11 "For in six days the Lord made the heavens and the earth, the sea and all that is in them, and rested the seventh day. Therefore the Lord blessed the Sabbath day and hallowed it."

Ex.23:12 "Six days you shall do your work, and on the seventh day you shall rest, that your ox and your donkey may rest, and the son of your female servant and the stranger may be refreshed."

Deut.5:14 "But the seventh day is a Sabbath to your God. In it you shall do no work; you nor your son, nor your daughter, nor your male servant, nor your female servant, nor your ox, nor your donkey, nor any of your cattle, nor your stranger who is within your gates, that your male servant and your female servant may rest as well as you."

The use of the word "rest" in this form is connected to the Sabbath "rest" by these scriptures. The seventh month showing spiritual perfection, and the number 17 being the $7^{\text {th }}$ prime number, show it to be a Sabbath day. The final point is that all three of these dates are connected by the multiple of seven.

In verse 4 of Genesis 7, God speaks to Noah, stating that after seven more days He will cause it to rain on the earth. Then in verse 11 the Sabbath day for that year is given. "In the six hundredth year of Noah's life, in the second month, the seventeenth day of the month, on that day all the fountains of the great deep were broken up and the windows of heaven were opened."

If these three Sabbath days can be shown to correspond to the seven-day solar calendar as well as the HCC of 385 days, then their relationship would be an established fact. This can be demonstrated by dividing the 1656, the minimum number of years from Creation to the Flood, by 19, the cycle of the HCC, which is the conjunction of the sun, moon and earth - the alignment with each other.

Because the cycle of the HCC is 2.0844 hours longer than the corresponding solar period of 19 years, it is necessary to know the number of the 247-year cycles in 1656 AM, the first possible year of the Flood. The year 1656 divided by 247 equals 6.704 cycles. This is 6 complete 247 -year cycles with an additional 174 years. Divide 174 by $19=9.158$, placing 1656 in the tenth 19 -year cycle. The 0.158 times $19=3$, the number of years into the $10^{\text {th }}$ cycle of the seventh 247 -year cycle. Chart \#5, cycle \#10 line 3 found on the web page is a 13 -month year, which would be the first possible year for the Flood. The HCC for this year is 383 days long. The Flood year is 385 days long. (Note: See article on Noah's Flood and God’s Calendar.) As the HCC shows, there is no year that meets the 385 day requirement until 1661. This falls in the range of years as previously stated, showing it to be the year of the Flood.

To show the correlation of these dates, the gain of the HCC must be determined. (See chart \#6 below, and year 1653 showing an 8 -day difference).

| Total Days HCC and SC |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Year | TD HCC |  | TD SC |  | Year | TD HCC |  | TD SC |  | Year | TD HCC |  | TD SC |  |
| 1 | 1501 | 6939 | -6 | 6940 |  | 1995 | 6939 | -9 | 6939 |  | 2489 | 6939 | -11 | 6940 |  |
| 2 | 1520 | 6941 | -7 | 6940 |  | 2014 | 6941 | -10 | 6940 |  | 2508 | 6941 | -12 | 6940 |  |
| 3 | 1539 | 6940 | -9 | *6938 | 1536 | 2033 | 6940 | -10 | 6940 |  | 2527 | 6940 | -13 | 6939 |  |
| 4 | 1558 | 6939 | -8 | 6940 |  | 2052 | 6939 | -10 | *6939 | 2048 | 2546 | 6939 | -12 | 6940 |  |
| 5 | 1577 | 6939 | -7 | 6940 |  | 2071 | 6939 | -10 | 6939 |  | 2565 | 6939 | -12 | *6939 | 2560 |
| 6 | 1596 | 6940 | -7 | 6940 |  | 2090 | 6940 | -10 | 6940 |  | 2584 | 6940 | -12 | 6940 |  |
| 7 | 1615 | 6941 | -9 | 6939 |  | 2109 | 6941 | -11 | 6940 |  | 2603 | 6941 | -14 | 6939 |  |
| 8 | 1634 | 6940 | -9 | 6940 |  | 2128 | 6940 | -11 | 6940 |  | 2622 | 6940 | -14 | 6940 |  |
| 9 | 1653 | 6939 | -8 | 6940 |  | 2147 | 6939 | -11 | 6939 |  | 2641 | 6939 | -13 | 6940 |  |
| 10 | 1672 | 6939 | -8 | *6939 | 1664 | 2166 | 6939 | -10 | 6940 |  | 2660 | 6939 | -12 | 6940 |  |
| 11 | 1691 | 6940 | -9 | 6939 |  | 2185 | 6940 | -11 | *6939 | 2176 | 2679 | 6940 | -13 | 6939 |  |
| 12 | 1710 | 6939 | -8 | 6940 |  | 2204 | 6939 | -10 | 6940 |  | 2698 | 6939 | -13 | *6939 | 2688 |
| 13 | 1729 | 6940 | -8 | 6940 |  | 2223 | 6940 | -11 | 6939 |  | 2717 | 6940 | -13 | 6940 |  |
| 7.903 |  |  |  |  |  | 10.16 |  |  |  |  | 12.42 |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Year | TD HCC |  | TD SC |  | Year | TD HCC |  | TD SC |  | Year | TD HCC |  | TD SC |  |
| 1 | 1748 | 6939 | -7 | 6940 |  | 2242 | 6939 | -10 | 6940 |  | 2736 | 6939 | -12 | 6940 |  |
| 2 | 1767 | 6941 | -9 | 6939 |  | 2261 | 6941 | -11 | 6940 |  | 2755 | 6941 | -14 | 6939 |  |
| 3 | 1786 | 6940 | -9 | 6940 |  | 2280 | 6940 | -11 | 6940 |  | 2774 | 6940 | -14 | 6940 |  |
| 4 | 1805 | 6939 | -9 | *6939 | 1792 | 2299 | 6939 | -11 | 6939 |  | 2793 | 6939 | -13 | 6940 |  |
| 5 | 1824 | 6939 | -8 | 6940 |  | 2318 | 6939 | -11 | *6939 | 2304 | 2812 | 6939 | -12 | 6940 |  |
| 6 | 1843 | 6940 | -9 | 6939 |  | 2337 | 6940 | -11 | 6940 |  | 2831 | 6940 | -14 | *6938 | 2816 |
| 7 | 1862 | 6941 | -10 | 6940 |  | 2356 | 6941 | -12 | 6940 |  | 2850 | 6941 | -15 | 6940 |  |
| 8 | 1881 | 6940 | -10 | 6940 |  | 2375 | 6940 | -13 | 6939 |  | 2869 | 6940 | -15 | 6940 |  |
| 9 | 1900 | 6939 | -9 | 6940 |  | 2394 | 6939 | -12 | 6940 |  | 2888 | 6939 | -14 | 6940 |  |
| 10 | 1919 | 6939 | -9 | 6939 |  | 2413 | 6939 | -11 | 6940 |  | 2907 | 6939 | -14 | 6939 |  |
| 11 | 1938 | 6940 | -10 | *6939 | 1920 | 2432 | 6940 | -12 | *6939 | 2432 | 2926 | 6940 | -14 | 6940 |  |
| 12 | 1957 | 6939 | -9 | 6940 |  | 2451 | 6939 | -12 | 6939 |  | 2945 | 6939 | -14 | *6939 | 2944 |
| 13 | 1976 | 6940 | -9 | 6940 |  | 2470 | 6940 | -12 | 6940 |  | 2964 | 6940 | -14 | 6940 |  |
| 9.03 |  |  |  |  |  | 11.29 |  |  |  |  | 13.54 |  |  |  | 2 |

## CHART \#10 SHOWING YEARS TO THE FLOOD

To demonstrate the correct relationship of time between the seven day solar calendar and the HCC for any year, it is necessary to determine the end of the closest 19-year cycle, and the difference as shown in whole days in chart \#6 above. It is no longer necessary to go through these steps because the Calendar Generator does them for you, but they are included to show you how the process works.

The close of the $9^{\text {th }} 19$ year cycle is solar year 1653 , which is a type 3 year, taken from chart \#11 showing year 1653.
ADD CHART $* * * * * * * * * * * * * * * * * * * * * * * * * * * * * *$
The HCC year 1653 is arrived at by beginning with cycle \#1, of Chart \#5 - Creation, and going forward in increments of 247 years, which is 6 complete 247 years, plus 171 years. The 171 years is divided by 19 giving the last complete cycle as \#9. At this point chart \#6 above shows the HCC has gained 8 days over the solar calendar. The type 3 year puts the Sabbaths of the solar calendar year 1654 on the $4^{\text {th }}, 11^{\text {th }}$ and $18^{\text {th }}$ day of that year. (See the blue dates in the small box of Chart $\# 10$ on page 23). The $18^{\text {th }}$ is the first date in blue in the large box.

|  |  |  |  |  |  |  | 25 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 26 | 27 | 28 | 29 | 1 | 2 | 3 |
| 1654 | S | M | T | W | T | F | SA |
|  |  |  |  |  |  |  |  |
|  | 363 | 364 | 365 | 1 | 2 | 3 | 4 |
| 5 | 6 | 7 | 8 | 9 | 10 | 11 |  |

Chart \#11 has 1653 as a type 3year.Chart \# 6 gives the difference in days for 1653 as 8 days. The $\mathbf{7 d a y ~ S . C . ~ i s ~ n o w ~} 8$ days advanced at the start of 1654.Chart\#5 cycle\#10 line1 has the 1st of Tisri on the Sabbath. The year 1654 HCC has 355 days. The S.C. has 365 days. The difference is 10 days. 10-8=2 days difference at the end of this year. The red 5 over the blue 3 in the bottom line of the right-hand box shows this difference.* The small box gives the end of the previous year and the start of the current year.

Establishing the Flood Dates Chart 10 Page 1

|  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 30 |  |  |  |  | 29 |  |  |  | 30 |
| 10 | 17 | 24 | 1 | 8 | 15 | 22 | 29 | 7 | 14 | 21 | 28 |
| 18 | 25 | 32 | 39 | 46 | 53 | 60 | 67 | 74 | 81 | 88 | 95 |
|  |  |  | 29 |  |  |  | 30 |  |  |  | 29 |
| 5 | 12 | 19 | 26 | 4 | 11 | 18 | 25 | 2 | 9 | 16 | 23 |
| 102 | 109 | 116 | 123 | 130 | 137 | 144 | 151 | 158 | 165 | 172 | 179 |
|  |  |  |  | $30 t$ |  |  |  | 30 |  |  |  |
| 1 | 8 | 15 | 23 | 29 | 6 | 13 | 20 | 27 | 4 | 11 | 18 |
| 186 | 193 | 200 | 207 | 214 | 221 | 228 | 235 | 242 | 249 | 256 | 263 |
| 30 |  |  |  | 29 |  |  |  |  | 30 |  |  |
| 25 | 2 | 9 | 16 | 23 | 1 | 8 | 15 | 22 | 29 | 6 | 13 |
| 270 | 277 | 284 | 291 | 298 | 305 | 312 | 319 | 326 | 333 | 340 | 347 |
|  | 29 |  |  |  |  |  |  |  |  |  |  |
| 20 | 27 | 5 | 12 |  |  |  |  |  |  |  |  |
| 354 | 361 | 3 | 10 |  |  |  |  |  |  |  |  |

The corresponding Sabbath days of the HCC are Adar 25 and Nisan 3, shown in red in the small box of Chart \#10 ABOVE, with Nisan 10 shown in the large box, resulting in an eight-day gain. The HCC dates are the published ones found in the $11^{\text {th }}$ edition of the Encyclopedia Britannica. The HCC shows that the $7^{\text {th }}$ year from 1654 has a length of 385 days and would correspond with the year 1661 AM. (See chart \#5 on the web site, page 2, and Cycle \#10, line 8). The dates established from Chart \#5 use the last year of cycle 9, showing the first day of Tisri to be a Saturday, and the length of the year as 385 days. These dates are given in the long year chart \#8 page 2 on the web site. The Sabbath dates for the first seven days of that year, 1661 are shown in the left hand box of Chart \#10 below. The eighth through the thirteenth months are shown in the bottom of the right hand box. The year length of 385 days is shown in the printed section of the left hand box.

| Flood | Yea |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 29 | 1 | 2 | 3 | 4 | 5 |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 6 | 7 | 8 | 9 | 10 | 11 | 12 |  | 30 |  |  | $\bigcirc$ | 29 |  |  |  |  | 30 |  |
| 1661 | S | M | T | W | T | F | SA | 19 | 26 | 3 | 10 | 17 | 24 | 2 | 9 | 16 | 23 | 30 | 7 |
|  |  |  |  |  |  |  |  | 9 | 16 | 23 | 30 | 3 | 44 | 51 | 58 | 65 | 72 | 79 | 86 |
|  | 362 | 363 | 364 | 365 | 366 | 1 | 2 |  |  | 29 |  |  |  | 30 |  |  |  | 29 |  |
|  |  |  |  |  |  |  |  | 14 | 21 | 28 | 6 | 13 | 20 | 27 | 4 | 11 | 18 | 25 | 3 |
| Note that the 2nd month has the 17th as a Sabbath; which was the start of the flood. This year, 1661 , the HCC is 385 days Iong. The SC 365 days. The difference is 20 days. 20 days minus 10 days is a $\mathbf{1 0}$ day difference at the end of 1661 . The bottom line of the right-hand box has a red 5 over a blue 15 ,showing this difference. Chart \# 5 cycle \#10 line 8 has the first of Tisri on Thursday. The red 3 on the 30 T line shows this. |  |  |  |  |  |  |  | 93 | 100 | 107 | 114 | 121 | 128 | 135 | 142 | 149 | 156 | 163 | 170 |
|  |  |  |  |  |  |  |  |  |  | 30t |  |  |  |  | 30 |  |  |  | 30 |
|  |  |  |  |  |  |  |  | 10 | 17 | 24 | 1 | 8 | 15 | 22 | 29 | 6 | 13 | 20 | 27 |
|  |  |  |  |  |  |  |  | 177 | 184 | 191 | 198 | 205 | 212 | 219 | 226 | 233 | 240 | 247 | 254 |
|  |  |  |  |  |  |  |  |  |  |  | 29 |  |  |  | 30 |  |  |  |  |
|  |  |  |  |  |  |  |  | 4 | 11 | 18 | 25 | 3 | 10 | 17 | 24 | 1 | 8 | 15 | 22 |
|  |  |  |  |  |  |  |  | 261 | 268 | 275 | 282 | 289 | 296 | 303 | 310 | 317 | 324 | 331 | 338 |
|  |  |  |  |  |  |  |  | 30 |  |  |  | 29 |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  | 29 | 6 | 13 | 20 | 27 | 5 | 12 |  |  |  |  |  |
|  |  |  |  |  |  |  |  | 345 | 352 | 359 | 1 | 8 | 15 | 22 |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |



It must be remembered that the progression of weekly Sabbaths is the unbreakable calendar of the bible. When the bible gives a Sabbath date, any calendars not in agreement are spurious. In the case of the flood there are two markers; the numbers of days in the year - 385, and the Sabbaths of the second and seventh months of that year. This is the second step showing the alignment of the seven-day SC and the HCC to the Biblical account of the Flood.

The Bible statement of Genesis 7, verses 4 and11 gives correlating dates of the second month, the tenth and the seventeenth days as Sabbaths, falling in the solar and the HCC year 1661. Chart \#10 on page 23 page 3 shows that the Sabbath falls in the $2^{\text {nd }}$ month Iyar, on the seventeenth day just as the Bible states. Also, in Genesis 8:4 it states that the ark rested in the seventh month on the seventeenth day of the month. The word "rested" is the same word used in Exodus 20:14, the giving of the Sabbath commandment. The chart shows the seventeenth of the seventh month to be a Sabbath. This chart also shows the 385 day progression for that year, completing the proof of the Flood account.

It becomes clear at this point that the HCC is following the exact days of the seven-day SC, the Gregorian calendar and the Biblical account of the Flood, making this the second proof that God is using the Hebrew Calculated Calendar.

## ESTABLISHING THE YEAR OF THE EXODUS

The third sabbatical guide post is found in Exodus 16, where the Biblical account relates that in the year of the Exodus, the $15^{\text {th }}$ and $22^{\text {nd }}$ days of the second month were Sabbaths. As Genesis 5 gave the potential for the year of the Flood, Genesis 11:10-32 gives the range of years to Abram's departure to the land of Canaan. This will lead to the year of the Exodus. Again, God gives blocks of time in years, not necessarily corresponding to a calendar progression of years.

The eight patriarchs, beginning with Arphaxad, and ending with Nahor, Abraham’s grandfather, add up to 220 years, plus 2 years for his birth after the Flood, results in 222 years. Genesis 11:32 tells us that Terah, Abraham's father, died at age 205 years in Haran. At the death of his father, Abram was
told by God to depart Haran. Genesis 12:4 gives Abram's age as 75. Abram’s age must be subtracted from his father's to get the correct time element of the birth of Abram; meaning that Terah was 130 years old at the birth of Abram - 205 minus 75 equals 130. Adding this to the 222 years gives a total of 352 years.

The Years...

| Antediluvian Patriarchs Lived Before Their <br> Sons' Birth |  |  |
| :--- | ---: | :---: |
|  |  | Heb. |
| Adam | Gen. v. .3 | 130 |
| Seth | ---6. | 105 |
| Enos | ---9. | 90 |
| Cainan | --12. | 70 |
| Mahalaleel | ---15. | 65 |
| Jared | ---18. | 162 |
| Enoch | --21. | 65 |
| Methuselah | ---25. | 187 |
| Lamech | ---28. | 182 |
| Noah, at the flood | Gen. vii.6. | 600 |
| Total before the flood |  |  |

Abram was 75 when he left Haran. The wandering as stated in Exodus 12:40-41 was 430 years to the day. By adding this to the minimum life span of the patriarchs, 352 years, plus Abraham's age of 75 , the total is 857 years. Adding this to the Flood year - 1661 - the earliest year for the Exodus would be 2518 AM. When considering the time of the year from birth to birth, this could be as late as 2526 AM (after man.)

In order to correctly place this date in the HCC of 2518, the year must first be divided by 247 . It goes 10 times and leaves a remainder of 48 years. The 48 years is then divided by 19. It goes twice with the remainder of 10 . This places the date of 2518 in the 10th year of cycle 3 of chart \#5, page 1 . There is an additional marker showing the correct placement for the Exodus year found in Numbers 1:1. "Now the Lord spoke to Moses in the Wilderness of Sinai, in the tabernacle of meeting, on the first day of the second month, in the second year after they had come out of the land of Egypt."

It should be understood that God is speaking to Moses on a Sabbath day. Moses is in the tabernacle where he would be expected to be on the weekly Sabbath. In addition, God calls out this day - the first day of the second month - giving it a special mark as a Sabbath.

The importance of this day is seen by adding increments of seven to the first day, giving Sabbaths on the first, eighth, fifteenth and twenty second days of the month. This is the same Sabbath rotation that is found in the second month of the year of the Exodus - Ex. 16:1-30.

There is another curious relationship that occurs here. As the past teaching has shown, the Passover of Exodus 12 occurs on a Wednesday. Chart \#5 will show this by the yellow highlight for year 2518 and 2519, meaning the year 2519 and 2520 have the fourteenth of Nisan on a Wednesday. This is exactly what the Bible account reveals.

This anomaly, along with the Sabbath placement in the second month on the first, eighth, fifteenth and twenty-second days, will accurately place the first two years of the Exodus in Chart \#5. The fact of having two consecutive years beginning with the same Sabbath rotation will mark the year of the Exodus. Note: This can only happen in two consecutive years when the year lengths are different; as a thirteen month followed by a twelve month year. In a 247 year cycle this happens only eleven times.

Now the Exodus date can be determined in cycle 3 of chart \#5 as 2519, because it shows 2519 and 2520 having the same day of the week, Saturday, for the Feast of Trumpets. This can be confirmed in Charts \#7 and \#8 on the web site. Page 2 of each chart shows that when the first of Tisri falls on a Sabbath, the Sabbath progression of the second month is the same, and that is on the first, eighth, fifteenth and twenty-second.

Just as the calendar charts \#9 and \#10 were constructed to show the correlation of the seven day SC and the HCC for the Creation and the Flood dates, so a similar calendar - Chart \#12 - was made to show this relationship for the Exodus. The calendar generator for this year gives the corresponding Gregorian dates.

## EXPLANATION OF CHART \#12

Calendar Chart \#12 below begins with the year 2509, which is the beginning of the third cycle as found in Chart \#5, page 1. It also shows that the first of Tisri is on a Monday, resulting in the first Sabbath on the sixth day of the seventh month. The large box of Chart \#12 shows a red twenty-seven under the red 30T and sets the Sabbath rotation for the whole year. It also places the Sabbaths of the HCC for year 2509 (in red) on the same days as the Sabbaths of the seven day SC (in blue). Chart \#12 demonstrates that the Sabbaths of each calendar agree, which the calendar generator below also shows. The sequential years leading up to the Exodus of 2519 are shown on this Chart \#12 and it shows that the Sabbaths of the seven day SC and the HCC coincide. The fact that the first of Tisri, and the resulting Sabbath days, always agree in every year with the seven day SC points to the perfection embedded in these calendars.

|  |  |  |  |  |  |  | 16 | Establishing Exodus Dates Chart 12 Page 1 |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 17 | 18 | 19 | 20 | 21 | 22 | 23 |  |  |  |  |  |  |  |  |  |  |  |  |
| 2509 | S | M | T | W | T | F | SA |  |  |  |  | 30 |  |  |  | 29 |  |  |  |
|  | 366 | 1 | 2 | 3 | 4 | 5 | C | 1 | 8 | 15 | 22 | 29 | 6 | 13 | 20 | 27 | 5 | 12 | 19 |
| Chart\#13 is page 27 of chart \#3,the 7 day SC. This shows the end of 2508 having a 1 day carry over as shown in blue on the bottom line of the small box by the year 366 . Chart \#6 gives the difference in days for 2508 as 12 days. The SC is now 12 days advanced at the start of 2509 . This shown by the red 1 over the blue 13 at the top of the right-hand box. The HCC has 355 days; the SC 365 days. At the end of this year there will be a 2-day difference. $12-10=2$. This is shown by red 3 over the blue 5 in the bottom line of the righthand box. Chart \#5 cycle \#3 line 1 has the first Tisri on Monday.See red 6 on 30T line. -The Small box gives the end of the previous year and the start of the current year. |  |  |  |  |  |  |  | 13 | 20 | 27 | 34 | 41 | 48 | 55 | 62 | 69 | 76 | 83 | 90 |
|  |  |  |  |  |  |  |  | 30 |  |  |  | 29 |  |  |  |  | 30 |  |  |
|  |  |  |  |  |  |  |  | 26 | 3 | 10 | 17 | 24 | 2 | 9 | 16 | 23 | 30 | 7 | 14 |
|  |  |  |  |  |  |  |  | 97 | 104 | 111 | 118 | 125 | 132 | 139 | 146 | 153 | 160 | 167 | 174 |
|  |  |  |  |  |  |  |  |  | 29 |  |  |  | 30t |  |  |  | 30 |  |  |
|  |  |  |  |  |  |  |  | 21 | 28 | 6 | 13 | 20 | 27 | 4 | 11 | 18 | 25 | 2 | 9 |
|  |  |  |  |  |  |  |  | 181 | 188 | 195 | 202 | 209 | 216 | 223 | 230 | 237 | 244 | 251 | 258 |
|  |  |  |  |  |  |  |  |  |  | 30 |  |  |  | 29 |  |  |  | 30 |  |
|  |  |  |  |  |  |  |  | 16 | 23 | 30 | 7 | 14 | 21 | 28 | 6 | 13 | 20 | 27 | 4 |
|  |  |  |  |  |  |  |  | 265 | 272 | 279 | 286 | 293 | 300 | 307 | 314 | 321 | 328 | 335 | 342 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  | 11 | 18 | 25 | 3 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  | 349 | 356 | 363 | 5 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |



The calendar layout of Chart \#12, page 4 for 2519 and 2520 show the same Sabbath days as Exodus 16 and Numbers 1. This again proves the agreement of the seven day SC, the HCC and the Biblical accounts.

Gregorian Calendar
Hebrew Calendar: 385 days
Solar Calendar: 365 days

YEAR: 1528 BC 2519 AM
Difference: 20 days
Difference: 11 days Last Year: -9 days Feast of Trumpets: Aug 26



## ESTABLISHING THE DATES OF JOSHUA 5

Joshua's Passover

The fourth event in which the Bible records a verifiable passage of time is found in the Passover of Joshua 5, where the specific day of a month ( $14^{\text {th }}$ of Nisan, ) and the number of years (40) from the Exodus are found. This Passover occurs at the beginning of the $41^{\text {st }}$ year after leaving Egypt.

In order to understand the correct time frame, see in Deut. 2:14, "And the time we took to come from Kadesh Barena until we crossed over the Valley of the Zered was thirty-eight years, until all the generation of men of war was consumed from the midst of the camp, just as the Lord had sworn to them."

Note: The forty year trek did not directly apply to the men of war, but to the sons being required to shepherd the flock in the wilderness. "And your sons shall be shepherds in the wilderness, and bear the brunt of your infidelity, until your carcasses are consumed in the wilderness." (Num. 14:33)

The thirty-eight years has passed since God's punishment. This meant they had completed thirty-nine years and were starting the fortieth year - thirty-eight years for the men of war to be consumed, plus the first year in the wilderness makes thirty-nine years complete. This is confirmed by Deut. 1:3, "Now it came to pass in the fortieth year, in the eleventh month, on the first day of the month that Moses spoke to the children of Israel according to all that the Lord had given him as commandments to them."

Moses died near the end of this month of the fortieth year, and Joshua was given the leadership of Israel. Again it is seen that God recorded a very accurate passage of time, allowing the placement of Joshua 5 into the two calendars - the seven day SC and the HCC.

Taking the year of the Exodus, 2519 AM, and adding 39 years to it shows that Moses died near the end of 2558 AM. The Israelites left Egypt at the beginning of the year, so 2519 AM is included as part of the forty years.

In order to place 2558 AM into the seven-day SC and the HCC, it is divided by 19. It goes 134 times with a remainder of 12 years. The 13419 year cycles is divided by 13 , the number of 19-year cycles in the repetitive block of 247 years. It goes ten times, leaving a remainder of four 19-year cycles. This means that the 12 year remainder starts at the beginning of Cycle 5 on Chart \#5, page 2.
Thus the Passover of Joshua 5 occurred at the start of the following year, 2559 AM.
The calendar on Chart \#14 below records the numbered days of the month as they fall on the weekly Sabbath beginning with the year 2547 AM; the first year of the $5^{\text {th }}$ cycle, Chart \#5 page 2 . The explanation for the placing of the dates into the calendars of Chart \#14 is addressed in the chart, and covers all the years leading up to, and including, 2559 AM. At the top of page 5 Chart \#14 below, the year 2559 AM has the $14^{\text {th }}$ of Nisan on a Friday, which might be rejected in light of the general belief that it occurred on the Sabbath of that year instead of the Friday that the calendar shows.

|  |  |  |  |  |  |  | 23 |  |  |  | 30 |  |  |  | 29 |  |  |  | 30 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 24 | 25 | 26 | 27 | 28 | 29 | 1 |  | 15 | 22 | 29 | 6 | 13 | 20 | 27 | 5 | 12 | 19 | 26 | 3 |
| 2559 |  |  |  |  |  |  | 8 |  | 14 | 21 | 28 | 35 | 42 | 49 | 56 | 63 | 70 | 77 | 84 | 91 |
|  | S | M | T | W | T | F | SA |  |  |  | 29 |  |  |  |  | 30 |  |  |  | 29 |
|  |  |  |  |  |  |  |  |  | 10 | 17 | 24 | 2 | 9 | 16 | 23 | 30 | 7 | 14 | 21 | 28 |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  | 98 | 105 | 112 | 119 | 126 | 133 | 140 | 147 | 154 | 161 | 168 | 175 |
|  |  |  |  |  |  |  |  |  |  |  |  | 30 t |  |  |  | 30 |  |  |  |  |
| The H.C.C. is 355 days long. The 1st day of the 7th month is a Monday. The S.C. is 365 days long. The difference is 10 days. $1+10=11$ days. |  |  |  |  |  |  |  |  | 6 | 13 | 20 | 27 | 4 | 11 | 18 | 25 | 2 | 9 | 16 | 23 |
|  |  |  |  |  |  |  |  |  | 182 | 189 | 196 | 203 | 210 | 217 | 224 | 231 | 238 | 245 | 252 | 259 |
|  |  |  |  |  |  |  |  |  | 30 |  |  |  | 29 |  |  |  | 30 |  |  |  |
|  |  |  |  |  |  |  |  |  | 30 | 7 | 14 | 21 | 28 | 6 | 13 | 20 | 27 | 4 | 11 | 18 |
|  |  |  |  |  |  |  |  |  | 266 | 273 | 280 | 287 | 294 | 301 | 308 | 315 | 322 | 329 | 336 | 343 |
| *This is the year of Joshua 5. |  |  |  |  |  |  |  |  | 29 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  | 25 | 3 | 10 | 17 | 24 |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  | 350 | 357 | 364 | 6 | 13 |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Chart 14, Page 5


These three types of calendars have been in perfect agreement on the Creation, the Flood and the Exodus, showing the fourteenth occurred on a Friday. This requires Joshua 5:10-12 to be read with the following understanding: Verse 10, "So the children of Israel camped in Gilgel, and kept the Passover on the $14^{\text {th }}$ day of the month at twilight on the plain of Jericho."

This statement puts Thursday evening as the commencement of the Passover. Verse 11, "And they ate of the produce of the land on the day after the Passover, unleavened bread and parched grain, on the very same day." This resulted in a double Sabbath - the First Day of Unleavened bread, and the seventh-day weekly Sabbath. The day following the Passover would begin on a Friday evening.

The question becomes, where would they get the grain seeing that it appears they had only manna to eat? There were two sources. One is found in Deut. 2:6, "You shall buy food from them with money that you may eat." The word food is Strong's \#400, which is a general term for food, meat, grain, etc. The second source of grain would have come from the people they conquered, Og and Sihon.

Obviously if God allowed them to buy grain to eat, He would allow them to eat the grain they captured. What they could not do was use the captured grain as a wave sheaf offering because they did not raise the grain themselves as instructed in Leviticus 23:11 \& 14 .

Joshua 5:12 reads, "Then the manna ceased on the day after they had eaten the produce of the land; and the children of Israel no longer had manna, but they ate the food of the land of Canaan that year." This scripture tells us that is exactly what happened. They knew this was going to happen - no more manna - and they prepared for it as God commanded in Leviticus 23:9-11, 14 "And the Lord spoke to Moses, saying, 'Speak to the children of Israel, and say to them: 'When you come into the land which I give to you, and reap its harvest, then you shall bring a sheaf of the firstfruits of your harvest to the priest. He shall wave the sheaf before the LORD, to be accepted on your behalf; on the day after the Sabbath the priest shall wave it...You shall eat neither bread nor parched grain nor fresh grain until the same day that you have brought an offering to your God; it shall be a statute forever throughout your generations in all your dwellings.'"" The wave sheaf had to come from their own harvest!

## GOD STARTS MOSES ON A MILITARY CAMPAGIN

God starts Moses on a military campaign to conquer the Promised Land on the east side of the Jordan. This campaign begins sometime around the middle of the sixth month. This is established through the following scriptures: "Now when all the congregation saw that Aaron was dead, all the house of Israel mourned for Aaron thirty days" (Num.20:29). "And Aaron the priest went up into Mount Hor at the commandment of the LORD, and died there, in the fortieth year after the children of Israel were come out of the land of Egypt, in the first day of the fifth month" (Num.33:38).

Aaron died at the beginning of the fifth month and was mourned 30 days. Thus they started their journey to the Promised Land at the beginning of the sixth month. Deuteronomy 1:2 shows eleven days were required to arrive at Mt. Horeb. Numbers 33:41-49 records the Israelites had a total of eight campsites during these eleven days. The fourth campsite after leaving Mt. Hor puts them on the border between Moab and the Amorites, placing them at the border of the Promised Land. This sets the travel time at about half of the eleven days.

## THE LANDS GOD GAVE AS A POSSESSION

God told Moses that He gave the land of Amon to the descendants of Lot for a possession. Deuteronomy $2: 5$ shows God gave Mt. Seir to the descendants of Esau as a possession. Now note in verse 31of Deuteronomy 2, "And the LorD said to me, 'See, I have begun to give Sihon and his land over to you. Begin to possess it, that you may inherit his land.'"

God gives the land of the king of Sihon as a possession to Israel. Deuteronomy 3:1-2, "Then we turned and went up the road to Bashan; and Og king of Bashan came out against us, he and all his people, to battle at Edrei. And the LORD said to me, 'Do not fear him, for I have delivered him and all his people and his land into your hand; you shall do to him as you did to Sihon king of the Amorites, who dwelt at Heshbon.' God also gave this land to the Israelites as a possession." (As a confirmation, see Deut. 3:12-13.)

## MOSES IN THE PROMISED LAND

The term possession used by God denotes that the land was part of the promises He gave to Abraham. This means that Moses, along with the Israelites, had entered the Promised Land, contrary to the universal belief that he did not.

Notice, "Then I pleaded with the LORD at that time, saying: 'O Lord GOD, You have begun to show Your servant Your greatness and Your mighty hand, for what god is there in heaven or on earth who can do anything like Your works and Your mighty deeds? I pray, let me cross over and see the good land beyond the Jordan, those pleasant mountains, and Lebanon.'
"But the LORD was angry with me on your account, and would not listen to me. So the LORD said to me: ‘Enough of that! Speak no more to Me of this matter. ${ }^{27}$ Go up to the top of Pisgah, and lift your eyes toward the west, the north, the south, and the east; behold it with your eyes, for you shall not cross over this Jordan" (Deut.3:23-27).

The above scripture shows that Moses had pleaded with God to allow him to not only enter the Promised Land, but also to pass through its entirety. God relented from His original restriction and allowed him to enter the Promised Land east of the Jordan, but emphatically refused Moses’ plea to cross the Jordan. Moses, being east of the Jordan, was allowed to see the Promised Land. All the land he sees to the north, south, and east is predominantly on the east side of the Jordan. Therefore, Moses is standing in the Promised Land when he views it from the top of the mountain.

## THE PROMISED LAND ON BOTH SIDES OF THE JORDAN

As further proof, make note of Genesis $13: 3$ and 14-15. The land that Abraham views is the Promised Land. God tells him to look north, south, east, and west; so when he looks east he is looking at the land on the east side of the Jordan river- the same land that Moses took from the two kings. (Note: Abraham was about fifteen miles from the Jordan River at this time.)

Thus it is plain that the Promised Land lies on both sides of the Jordan. Genesis 15:18-21 explains, "On the same day the LORD made a covenant with Abram, saying: ‘To your descendants I have given this land, from the river of Egypt to the great river, the River Euphrates-the Kenites, the Kenezzites, the Kadmonites, the Hittites, the Perizzites, the Rephaim, the Amorites, the Canaanites, the Girgashites, and the Jebusites.'"

In the above scripture, God shows the land to be inherited includes that of ten nations. Two of these nations occupied the land east of the Jordan. As already shown, that land of the Amorite kings, Sihon and Og, was captured by Moses and declared an inherited land by God. In addition, they would inherit the land of Rephaim.

The Rephaims' land was also east of the Jordan. (Gen. 14:5). Their city, Asheroth, is about twenty miles east of the Sea of Galilee. This proves that once they crossed the Arnon River, they were in the Land of Promise as specified as a covenant by God to Abraham.

## WHAT TIME OF THE YEAR?

The campaigns against Sihon and Og were quick and decisive. (Deut. 2:34; 3:6-7).
Numbers 21:25, 35 further explains that they took immediate possession of the land. The following scripture shows that they saw the land at the time they conquered it and observed its desirability for their needs: "Now the children of Reuben and the children of Gad had a very great multitude of livestock: and they saw the land of Jazer, and the land of Gilead, that indeed the region was a place for livestock. Therefore they said, 'If we have found favor in your sight, let this land be given to your servants as a possession, and do not take us over the Jordan'" (Num.32:1, 5). There would be no reason for them to wait. They had an immediate need to pasture their animals.

The intervening account in the book of Numbers about Balak and Balaam was not chronological and would not affect either the time of their request for the land nor Moses’ decision to grant their request. They are parallel accounts. The third chapter of Deuteronomy shows that the land east of the Jordan was granted to them following the defeat of Sihon and Og. The previous scriptures show that the capture of the land east of the Jordan occurred during the later part of the sixth month of the fortieth year.

In the Antiquities of the Jews, chapter 5, Josephus tells us this battle occurred during the summer. "For it was the summer season." This agrees with the biblical time line as previously described.

## WHY THE ISRAELITES NEEDED TO PLANT

At this time Israel was basically an agricultural nation with different emphasis on diverse types of crops and animals. Those settling on the east side of the Jordan were primarily raising herds and flocks. These tribes took possession of a land that had already been organized to raise animals. (Deuteronomy 2:35 and 3:7 confirms this.)

As part of the agreement to occupy the east bank, they were to provide a fighting force of 40,000 men (Josh 4:13) to lead in their battle to conquer the land west of the Jordan. It should be noted that the census of Numbers 26 showed these combined tribes accounted for 110,000 men over the age of 20. Seventy thousand were left with the families and animals to provide protection and do the work required to sustain their livelihood and support their brethren who were going across the Jordan.

After they gained this land, these tribes had a definite list of needs to prepare their families for their absence as they were required to provide 40,000 men of war. They needed housing, which was ostensibly left there by the defeated nations, although some repair would have been required as a result of the war. Also, stock pens needed to be built or repaired. However, their most pressing need was that of food - grain. Why would this be when they had manna to eat? God had provided manna as a grain substitute for Israel because there was no provision for grain to be grown in the wilderness.

Notice, "Now the manna was like coriander seed, and its color like the color of bdellium. The people went about and gathered it, ground it on millstones or beat it in the mortar, cooked it in pans, and made cakes of it; and its taste was like the taste of pastry prepared with oil." (Num. 11:7-8).

The Israelites knew that this would cease once they had reached the Promised Land and they could provide this basic food item on their own: "Speak to the children of Israel, and say to them: 'When you come into the land which I give to you, and reap its harvest, then you shall bring a sheaf of the firstfruits of your harvest to the priest'" (Lev. 23:10).

The requirement of planting on their arrival in the new land is implicit. You cannot have a wave sheaf offering or grain to eat without planting the grain first. It also speaks to the fact that they would be expected to provide their own grain from their own labors. God was not running a welfare state. Every man is expected to provide for his own sustenance. II Thessalonians 3:10 explains, "For even when we were with you, we commanded you this: If anyone will not work, neither shall he eat."

Joshua 5:12 reads, "Then the manna ceased on the day after they had eaten the produce of the land; and the children of Israel no longer had manna, but they ate the food of the land of Canaan that year." This scripture tells us that is exactly what happened. They knew this was going to happen and they prepared for it as God commanded in Leviticus 23:9-11, 14 "And the Lord spoke to Moses, saying, 'Speak to the children of Israel, and say to them: 'When you come into the land which I give to you, and reap its harvest, then you shall bring a sheaf of the firstfruits of your harvest to the priest. He shall wave the sheaf before the LORD, to be accepted on your behalf; on the day after the Sabbath the priest shall wave it...You shall eat neither bread nor parched grain nor fresh grain until the same day that you have brought an offering to your God; it shall be a statute forever throughout your generations in all your dwellings.'"’

## THE BASICS

Not understanding the requirements and accompanying practices of raising small grains (barley and wheat) prevents those who are teaching today from realizing the natural way that this would have occurred, thus resulting in a twisted teaching of the events and timetables leading up to Joshua 5. The scriptures cited have shown that the Israelites were in control of the land before the fall planting season. It is imperative to know that barley and wheat are planted in the fall and the barley requires only five months to the harvest. The past custom was to graze these crops in their early stages of growth, which was a perfect fit for their herds and flocks. Lacking this information, one could not see the reality that they had an acceptable sheaf of grain to wave - a sheaf grown by the Israelites in the Promised Land.

The additional point that no grain could be harvested because this was a Sabbath would not apply because this Sabbath was a high day. Work required to prepare food for a high day is acceptable according to the word of God. Yet it would have required an unacceptable amount of work to harvest grain for more than two million people in one day. Remember, the manna had not ceased, so they had both manna and grain to eat on the First Day of Unleavened Bread. Once the offering of the wave sheaf had taken place in the morning of the next day, the first day of the week - Sunday, they could eat the new grain of the land.

They would have the wave sheaf offering, allowing them to eat the grain of the land.

## WHO HAD RESPONSIBILITY FOR CUTTING THE SHEAF?

Too many have been duped into thinking that the priest or his appointees had to go out after the Sabbath, the evening of the first day of the week of Unleavened Bread, and cut the grain to be waved a tradition that the Jews established. This was not the instruction given by God.

Leviticus 23:10, 14 states, "Speak to the children of Israel, and say to them: 'When you come into the land which I give to you, and reap its harvest, then you shall bring a sheaf of the first fruits of your harvest to the priest. "...It shall be a statute forever throughout your generations in all your dwellings."

These directions are addressed to the nation in general and specifically to those having control of the harvesting of the fields. Using the pronoun "you" and "your" gives each individual the responsibility to bring a sheaf of grain from his own field (a cut bundle) for the priest to wave. It had nothing to do with the priest or his appointed ones but it was those responsible for growing and harvesting who brought in the sheaf.

## WHAT DID GOD COMMAND

Due to the distances, sometimes requiring more than a day of travel from their fields to the location of the tabernacle, the sheaf would have been cut sometime prior to being waved. Then it would have been brought to the priest ahead of time for him to wave on the appointed day. There can be no doubt about this clear instruction. The individual had the responsibility to cut and bring the sheaf to the priest. Christ's sacrifice was for the individual. Each one is responsible for Christ being cut down.

It should be noted that when the stalk or stem that supports the head of the grain dries, the cereal stops growing. Unlike today, the grain was cut before it could be threshed, then bundled, leaving it in the field for the final drying. If the grain was left too long before cutting, it would fall to the ground and be lost. Leviticus 23:11-14 gives us the rest of the requirements of the wave sheaf. The only restriction placed on them was that no one was to eat of the grain before the wave sheaf offering. In fact, verse 13 means that God expected them to have harvested the grain ahead so that they could make this offering.

Notice, "He shall wave the sheaf before the Lord, to be accepted on your behalf; on the day after the Sabbath the priest shall wave it. And you shall offer on that day, when you wave the sheaf, a male lamb of the first year, without blemish, as a burnt offering to the LORD. Its grain offering shall be two-tenths of an ephah of fine flour mixed with oil, an offering made by fire to the LORD, for a sweet aroma; and its drink offering shall be of wine, one-fourth of a hin. You shall eat neither bread nor parched grain nor fresh grain until the same day that you have brought an offering to your God; it shall be a statute forever throughout your generations in all your dwellings" (Lev. 23:11-14).

Remember, these were directions given to all those raising that crop. This was a mini celebration, allowing them to eat of the new crop, or the first crop of their field, upon entering the Promised Land.

Deuteronomy 16:9 is cited as a direction that appears to prohibit the sheaf from being cut prior to the wave sheaf day. "You shall count seven weeks for yourself; begin to count the seven weeks from the time you begin to put the sickle to the grain."

The word "begin," Strong’s \#2490, is the hiphil - (infinitive) of this verb. The dictionary definition of infinitive is as follows: Infinitive - meaning, unlimited or indefinite: applied to a certain mode or form of the verb (by origin a verbal noun and in English commonly preceded by the preposition to) which expresses the general sense of the verb without restriction to person or number."

The English Hebrew Concordance of the Old Testament cites four places where the word is used in the infinitive.
(1) Genesis 11:6, " ...this they begin to do."
(2) Deuteronomy 16:9, "...from [such time as] thou beginnest."
(3) I Samuel 3:12, "...when I begin, I will also make an end."
(4) II Chronicles 31:10, "Since [the people] begin to bring."

This makes Deuteronomy 16:9 a general instruction about the beginning of the counting for the Feast of Weeks, and in no way prevented the general cutting of the grain before the wave sheaf offering day. The emphasis is on the number of weeks to be counted, not the starting point.

If Deuteronomy 16:9 were followed with the requirements of Leviticus 23 , they would have waited until after sundown of the Sabbath, cut a handful of grain and traveled whatever distance from the field to bring the sheaf to the priest for waving. After waving they would have returned home and cut and threshed more of the crop, then hurried back to the place where it was waved to make an offering of two-tenths of an ephah of fine flour as an additional offering. This would have been ridiculous when laid out as this timeline would demand.

Remember, they needed grain that the Israelites had grown for this offering as well as the wave offering. The inability to comply with Deuteronomy 16:9 and follow the instructions of Leviticus 23 supports the point already made about the general sense of time meant by the word "begin."

Christ tells us in John 10:35 that the scripture cannot be broken. With the correct understanding these scriptures do agree.

The wave sheaf was cut first; then the grain that was ripe was harvested for use after the sheaf was waved in preparation for the offering of the two tenths of the ephah of fine flour mixed with oil, just as Leviticus 23 requires. This rule prohibited the Israelites from eating the grain of the land until the wave sheaf was offered. Joshua 5:11 tells us that they did eat of this grain; so the wave sheaf offering had to have been made. Verse 12 shows that God confirmed that all was done with His approval by stopping the manna the next day; without any punishment or sign of His disapproval for not following the implicit instructions of Leviticus 23:10-14. Not following those instructions would have been a breach so serious as to bring immediate punishment by the Eternal. They ate and God blessed them with the conquering of Jericho.

It should now be clear that God's people were in the Land of Promise with adequate time to raise the small grain crop and wave it on the day following a weekly Sabbath. This allowed the sheaf to be waved during the Days of Unleavened Bread. This requirement places an important stamp of approval on it as representing the sinless life of Christ.

The correct understanding of Joshua 5:10-12 is as follows: The Passover was kept Thursday evening to Friday evening. The First Day of Unleavened Bread was Friday evening to Saturday evening; they ate the old corn of the land and manna on this day. On the morning of the first day of the week - Sunday the wave sheaf offering was made, allowing them to eat the new corn of the land, with the added fact that there was no manna to gather that morning.

The three types of calendars as brought forth beginning with Creation, followed by the Flood, the Exodus and Joshua 5 are absolute. They cannot be denied. As shown, the Passover of Joshua 5 fell on a Friday and the First Day of Unleavened Bread was on a Saturday.

## ALIGNING THE GREGORIAN CALENDAR TO THE SC AND HCC - CHART \#16

The following is presented to show how the original work was done. Calendar charts Number 9, 10, 12 and 14 on the web site show the progression of the seven day SC, and coupled with the HCC agree with each other. They in turn follow the written Bible accounts, proving these calendar days correct. Therefore, if a second type of calendar chart can show the Gregorian calendar dates matching in name and number the seven-day SC and HCC, it can with certainty tell the number of years from Creation to the present.

In addition, this alignment of calendars will prove that the Sabbath day (Saturday) we are presently keeping is an exact progressive replication of the Creation week, unbroken from its inception in increments of seven days.

Chart \#5, page 2, cycle \#7, line 1 shows the day of Trumpets that is presently used. It begins with Thursday, Oct. 2, 1997 and continues through Monday, Sept. 14, 2015.

It is generally known that approximately six thousand years have passed from Creation to the present. This time period has been established from the Biblical record and historical accounts, plus archaeological finds. Many studies have been done utilizing this material, resulting in a goodly number of years falling around this time of six thousand years. These studies all work from the present going back to Creation. They are the result of conflicting historical information in which none are able to agree or truly prove their validity, unlike this study which begins with Creation and comes forward to the present.

There are two facts that will guide the placement of the three calendars relative to each other. One is that it must show that it is close to 6,000 years from Creation - either plus or minus. Secondly, it must be in cycle \#7 as chart 5 shows if the dates are to be aligned because cycle \#7 is a record of the Feast Days of the present calendar.

Chart \#6 on the web site shows the sequence of years by using the HCC 19-year cycle and its repetitive block of 13 of these 19 -year cycles -247 years. The column marked"year" shows the year from Creation.

Page 5 of chart \#6 shows a span of years beginning with 5947 AM and ending in 6175 AM. One of these dates is needed for the alignment to occur.

It is the seventh 19-year period on chart \#6 that will match its dates with cycle \#7 on chart \#5, the present Gregorian dates. In addition, these dates must conform to those of the seven day SC. This is shown by constructing a chart of calendars demonstrating their alignment. Chart \#16 shown below does exactly that.

The revised chart \#3 was arrived at through the following progression of dates that our present Gregorian calendar exhibits. Because the Gregorian calendar is based on a seven-day week, it presents just two possibilities. One, its days match exactly the days of the week of the solar and HCC calendars, and secondly, if they do not match exactly, we are commemorating the wrong day for the seventh day of Creation and annual Sabbaths. Chart \#16 shows that the days of the week as we presently observe them coincide perfectly with the solar and the HCC calendars. It follows that they will always match because these weeks of seven days of the Gregorian calendar run independent of their yearly cycle.

The revised chart \#3 records these matching dates for 6072 years, and can be carried forward for as many years as one wishes to do so. In fact, chart \#3 is a rolling, unbroken calendar from the Creation to the present and beyond, and will be the calendar used through the 1,000 year reign of Christ. Why? Because the Sabbath will continue to be observed!

When it has been factually established by the charts and calendars presented from Creation to the present time, it should be obvious that God has given man a calendar based on mathematical progression of time in which every Sabbath day and every Holy Day was set from Creation. It is not difficult to understand that the weekly Sabbath has been ordained as a fixed day and that it represents a celebration of the Creation week, unbroken from the very week that God made this present Creation down to our time.

When considering that every calendar presented in this study from Creation to the present day had its starting point based on chart \#3 - the unbroken Sabbath days from Creation - it should then be clear that the first Holy Day was set by the Creation Sabbath. With every following Sabbath day being fixed by the mathematical form of seven, it follows that every Holy Day must also be fixed mathematically.

## UNDERSTANDING REVISED CHART \#3

The Calendar Generator found on the web site: www.biblicalcalendarproof.com was formulated from the expanded chart \#3. There are four columns added. Column 5 shows the first Sabbath day of each solar year. The sixth column shows a running total of the difference in days between the length of the HCC and solar calendars. This information ends at the year 741. Its purpose was to give useful data needed to formulate the calendar generator. The generator now shows this difference for any BC or AD year. The seventh column has the corresponding first Sabbath of the Gregorian year, which occurs in the first week of January. The year found in the eighth column is the match to the solar year found in column 1. In addition, every nineteenth year of column 1 is printed in red, and every fourth year is highlighted in yellow. Every $128^{\text {th }}$ year has a red and yellow highlight. This is the year without the added day for the normal leap year. The blue highlight is the designation for the leap year not taken in the Gregorian calendar. The final highlight is a green, yellow and red at every $896^{\text {th }}$ year, marking the point of repetition of the solar calendar.

| year | days | DCO | Type AM S | Gor. S Gor $\mathbf{Y r}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 365 | 1 | 1 | 7 | -11 | 1 | 4046 |
| 2 | 365 | 2 | 2 | 6 | -21 | 7 | 4045 |
| 3 | 365 | 3 | 3 | 5 | -1 | 5 | 4044 |
| 4 | 366 | 5 | 10 | 4 | -13 | 4 | 4043 |
| 5 | 365 | 6 | 5 | 2 | -25 | 3 | 4042 |
| 6 | 365 | 0 | 6 | 1 | -5 | 2 | 4041 |
| 7 | 365 | 1 | 1 | 7 | -16 | 7 | 4040 |
| 8 | 366 | 3 | 3 | 6 | 1 | 6 | 4039 |
| 9 | 365 | 4 | 4 | 4 | -9 | 5 | 4038 |
| 10 | 365 | 5 | 10 | 3 | -20 | 4 | 4037 |
| 11 | 365 | 6 | 5 | 2 | 0 | 2 | 4036 |
| 12 | 366 | 1 | 1 | 1 | -13 | 1 | 4035 |
| 13 | 365 | 2 | 2 | 6 | -23 | 7 | 4034 |
| 14 | 365 | 3 | 3 | 5 | -4 | 6 | 4034 |
| 15 | 365 | 4 | 4 | 4 | -14 | 4 | 4032 |
| 16 | 366 | 6 | 5 | 3 | -27 | 3 | 4031 |
| 17 | 365 | 0 | 6 | 1 | -8 | 2 | 4030 |
| 18 | 365 | 1 | 1 | 7 | -18 | 1 | 4029 |
| 19 | 1 | 365 | 2 | 2 | 6 | 0 | 6 |

## CALENDAR CHART \#16 EXPLAINED

Chart \#3 of the 7-day SC shows the year 6042 AM having a one day carryover. The new calendar chart will be \#16 below with a start year of 6043 AM. The small box on the left side shows the carryover for the 7 day SC in blue. The last day of 6042 AM is on a Sunday -the $365^{\text {th }}$ day. The first Sabbath of 6043 AM is the sixth day of the newyear. All of the figures in blue are multiples of seven and are the 7 day SC calendar for that year. The figures in red are the HCC dates, and show the 29 day lag - the red
five over the blue 34 , which was taken from chart \#6, page 5 , and cycle 6 . This lag will occur in the first month of the HCC year 6043 AM.

The blue lines in the right hand box are the Sabbath progression for the year 6043 AM. The fifth Sabbath of the year is the $34^{\text {th }}$ day of that year; the lag being 29 days means that the corresponding calculated Hebrew day will be the fifth day of Nisan. For this year the HCC is 354 days long, and the first of Tisri is on a Thursday. Having the first Sabbath on the fifth day of Nisan gives the first Sabbath of the seventh month on the third day of that month. Thus the first day of Tisri is Thursday. This can be verified on Chart 7, page 3; the Short Years in the Hebrew Calendar Calculations, showing the first Sabbath of the seventh month is on the third day of that month when the year is 354 days long. The Gregorian date given for the first of Tisri in 1997 is Thursday, the $2^{\text {nd }}$ of October. Chart \#5, page 1 has this date given for the start of Cycle \#7. Chart \#6, page 5, cycle 6 shows this date to be 6043 AM. By figuring forward and backward from the first Sabbath of the seventh month in increments of seven, and by placing the first Sabbath, October $4^{\text {th }}$, opposite the HCC Sabbath of the third in red, the three calendars are now aligned. All the Gregorian dates are in black in the large box to the right.

At the end of the year there is an eleven-day difference between the HCC and the 7-day SC. The original 29-day difference is reduced by the difference between the 7-day SC calendar year of 365 days and the HCC year of 354 days. The eleven day difference is subtracted from the original 29 days, leaving an 18-day difference at the end of this year. This can be seen in the bottom line of the right hand box. The sixth square shows the first day of Nisan in the red one located over the blue nineteen. This is the eighteen-day difference required to show that the calendars are accurate.



By following these sixteen years of calendars on the web site it is clearly shown that the Sabbath days of the three types of calendars are in agreement and that the HCC's Holy Days, as brought forward from Creation, agree with the Holy Days that are dated in the Gregorian calendar.

Just as every seventh day of the Solar Calendar has a fixed rotation locating it, the Gregorian calendar contains a similar rotation. Picking up this rotation from these sixteen calendars for the first Sabbath of the Gregorian year allows this rotation to be extended back to the year of Creation. It also gives the correct alignment of the Gregorian years to the Solar years, thus tying the three calendars together. Having this information allowed a formula to be drafted into a computer program that would produce a calendar of seven-day increments for any year BC or AD, beginning with Creation and extending into the future. The calendar generator was the result of this work.

There are three interesting circumstances that come to light when studying these calendars.
The leap year of the Gregorian calendar is offset by two years to the seven-day SC leap year.
The number of the year of the Gregorian calendar changes at a different season of the year winter - than the seven-day SC and the HCC - spring.

The months of the HCC year vary between twelve and thirteen and their day number never corresponds to the Gregorian calendar.

In spite of these three anomalies the sixteen calendars that follow have all dates agreeing, including their weekly names. These facts presented make it transparent that this was not the result of happenstance but was made by God with forethought and perfect design.

For your convenience the calendars for 2014 and 2015 are shown here.


DESTRUCTION OF THE SECOND TEMPLE
There is a point in time that is not found in the Bible, but is a very important Jewish date. The date recorded is the $9^{\text {th }}$ of Ab - the fifth month, at the ending of the Sabbath, for the beginning of the destruction of the Temple in 70 AD.

This gives the unique opportunity to determine if the Jewish authorities were following the new moon sightings or the calculated calendar to set this date. Obviously no record exists of any moon sightings for this period.

There are two important disasters in Jewish history - the destruction of the first and the second Temples in Jerusalem on the $9^{\text {th }}$ of Ab . According to the Mishnah these occurred on exactly the same day of the month, and the same day of the week in different years. Mishnah tract "Arakin11B" page 65 , "The day on which the first temple was destroyed was the $9^{\text {th }}$ of Ab , and it was going out of the Sabbath." This means one of two things - it was destroyed as the Sabbath day was ending and the $9^{\text {th }}$ of Ab began on the Sabbath day, or the next day meaning that Sunday would have been the $9^{\text {th }}$ of Ab . If this is compared to what Jeremiah says, the problem will be solved - Sabbath or Sunday?

Jeremiah 52:12-13, "Now in the $5^{\text {th }}$ month, in the $10^{\text {th }}$ day of the month, which was the $19^{\text {th }}$ year of Nebuchadnezzar, King of Babylon, came Neburaradan.... and burnt the house of the Lord." By comparing these two statements it is shown that the Sabbath day had to have been the $9^{\text {th }}$ of Ab. The Temple was burned as the Sabbath day, the $9^{\text {th }}$ of Ab , was coming to an end, and the $10^{\text {th }}$ day of Ab , the first day of the week was beginning.

Mishnah tract "Arakin 11B page 65: The same thing happened the second time." The statement shows the second Temple was burned in 70 AD , on the same day of the week, and the same day of the month See the calendar for 70 AD from the generator below.


THE CONCLUSION
As has been established, the seven day Solar Calendar represents an unbreakable progression of time from Creation to the present. As shown, the Gregorian calendar and the Hebrew Calculated Calendar agree with it. They in turn agree with the written Biblical record, proving that the Hebrew Calculated Calendar is, and was, the calendar God used from the beginning of Creation to our present time.

The statement," to our present time," can be conclusively shown in the following manner. It is known what date the HCC shows for the first of Tisri, as it falls on the present Gregorian calendar date. This is shown on Chart \#5, page 2, cycle \#7 which starts with the year 1997 and ends with the year 2015.

This is the calendar in use at this time. The days as we presently view them have names and numbers assigned to them according to the Gregorian system. Therefore, they are fixed dates and cannot be moved because it is how time is now kept.

The seven-day SC is also fixed; it begins from Creation and comes forward to our present day. In order to align these two calendars to determine what names and numbers of the two calendars match, it is necessary to know the exact number of days that have passed from Creation to the present. Once this unifying date is established, an absolute progression of dates back to Creation can be given in a combination of AD and BC dates.

The only reason that this alignment can be made is rooted in the fact that once God started the motion of the earth, moon and sun in their orbits, they have never changed in their relation to one another. Thus God has given a timing mechanism for a fixed calendar; one that can be calculated, allowing God's people to know in advance which date the Feast of Trumpets falls on. This alone mandates a calculated calendar in which the day for the first month is determined in advance. Since God commands men to have a convocation on the first day of the seventh month - Trumpets - He would, of necessity have given a way of knowing this date in advance because His people needed to travel to the place of assembly.

Now that it has been factually established by the charts and calendars presented from Creation to the present time, it should be obvious that God has given man a calendar based on a mathematical progression of time in which every Sabbath day and every Holy Day was set from Creation.

It is not hard to understand that the weekly Sabbath has been so ordained as a fixed day, and that it represents a celebration of the Creation week, unbroken from the very week that God made this present world down to our time. Considering that every calendar presented in this study from Creation to the present day had its starting point based on Chart \#3 - the unbroken Sabbath days from Creation - it should be clear that the first Holy Day was set by the first Sabbath day; every Sabbath being fixed by the mathematical progression of seven demands that every Holy Day must also be fixed mathematically.

This means that every Sabbath, and every Holy Day has been pre ordained from Creation to the present, and will continue in this fixed order until the return of Christ.

## The facts show without exception that these days are spelled out in the Hebrew Calculated

 Calendar.Don Roth
09/14

## ADENDUM

By looking at the placement for the Sabbath rotation in Chart \#3 for any year in question, a calendar can be constructed showing the Gregorian dates for that year as well as the dates of the Hebrew Calculated calendar. The Calendar Generator has been provided to simplify this work.

Calendar Chart \#19 is also included which covers the period from 18 BC to 1 AD , showing the correct change when going from AD to BC . In addition, a series of calendars are given covering the period of 22 AD to 35 AD, found under Chart \#20, allowing a closer study of the ministry of Christ and the time of His crucifixion.

Also included on the web site are all of the charts in their complete forms for your convenience.
The addition of these charts makes possible the study of any Biblical time period.

