Dear Friends, Brethren, Pastors and Elders,

Greetings in the wonderful Name of Yahshua.

It is well understood that the amount of calendar information is extensive and growing. It is also a fact that most ministry leaders do not have a great deal of time for original research. We have made a great effort to provide you with some of that on going truth accomplished by well-known scholars.

Even though many of us have a good understanding of Yahweh's calendar, there is much division on this subject. Some say that we will never come that we will never come into unity before Yahshua returns. We do not accept that negative concept. If we are led by Yahweh's Spirit of truth, we should be able to all come to agreement on the truth, if we look at all the evidence. However, this takes men of faith who are willing to keep studying and praying about this matter. We have sent this discussion to you because we consider you those leaders of quality.

Please take time to read this material and pray about it. These are serious facts that have extensive documentation and support.

Yahweh and Yahshua bless your search and dedication.

Agape Love in Him,

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Re: **The Observed Calendar of the Second Temple**

Dear Brethren:

Greetings to everyone, and I trust that everyone is doing well. I hope that everyone is looking forward to next year's Holy Days.

Enclosed please find a copy of most of my Calendar Presentation. The purpose of this Presentation is to provide you with an overwhelming volume of objective historical research. This research demonstrates that the Observed Calendar used by the priesthood of the Second Temple is known, and is an authoritative calendar that supersedes all other calendars. It is the Observed Calendar which the Body of Christ should be using today.

Some of you may be exasperated with the "Calendar Debate". I assure you that this Presentation is very different. The Observed Calendar of the Second Temple is demonstrated by providing you with a preponderance of historical documentation, presented to you as evidence, which is taken from authoritative sources, which provide their interrelated and collaborating information as "third-person" uninterested witnesses. The court is in session, I am presenting the case in favor of the Observed Calendar, you are the judge. After you have absorbed the historical data, you can make your own decision.

We know so much more than we did 20 years ago. It is now time to move beyond the stalemate with the calendar debate, look at the historical evidence, and make a decision.

In Service To The Brethren,

Wayne L. Atchison,

An Elder in the Body of the Messiah

Dear Festival Observer:

Some have expressed concern regarding the aspect of the calendar issue generating disunity among the brethren. Of greatest concern is the fear that some brethren will choose to keep the Holy Days one month later than others; and therefore groups will be split in attendance numbers for the Holy Days. A primary example would be the Sunriver Oregon feast site, in which some yet unknown number of brethren may decide to not attend the traditional Hillel II feast held in September; but rather will choose to observe the Observed Calendar of the Second Temple Era's feast one month later. Some view this as being divisive, and therefore view the Observed Calendar, which causes brethren to make a choice, as being "divisive".

Following are specific topic-sections which combine to address these concerns. [Abbreviation: the Observed Calendar of the Second Temple Era (OCSTE)]

The Astronomy Of Calendar Determination Is Not Explained In The Bible:

Many are bewildered by the fact that they base there lives on the authority of the Bible, but yet the Bible does not address the issue of how to determine the calendar. No where in the Bible do we have a verse: "Thus says YHWH, you shall determine My Calendar as follows". The absence of being able to reference chapter and verse as the authority for which calendar to use leaves many brethren feeling perplexed. Without the authority of the Bible, how can the question ever be answered?

When we reach for a cookbook and read the directions for making a cake, we are not surprised that the cookbook is written with specific assumptions about the reader's culinary skills and vocabulary? No cookbook can contain all information. Each cookbook must assume that the reader has acquired, or has access to, knowledge not contained within the cookbook. For example, specific aspects of temperatures, measures, methods, experience in do this and don't do this, as well as sanitation habits, will be considered external knowledge by the cookbook's author. If needed, the reader must acquire this external knowledge elsewhere.

Likewise we should not be upset when we discover that the Bible does not teach us about mathematics, geometry, the real length of the Egyptian cubit, chemistry, mechanics, or even the astronomy of calendar determination. These topics are external knowledge. The Bible assumes that the reader either already knows, does not need to know, or has the ability to find out, the external information.

It may be very hard for some brethren to admit, but the fact is that the astronomy of calendar determination is simply not written down in the Bible. It is external knowledge to the Bible.

Now what does it mean, the fact that the Bible is silent about the astronomy of the calendar it references. One, it could mean that the calendar rules were assumed to be common knowledge, everybody knew how to figure it out, so there was never any reason to explain it. Two, it could mean that the astronomy of calendar determination was known by others, that is, everybody knew that the calendar was determined by others, and so there was never any reason to explain it.

It is not an understatement to acknowledge that the historical evidence strongly supports the second alternative. Others, external to the Bible's text, were responsible for learning astronomy. It was they who determined the calendar, and everybody knew that they did. The problem and the question we have before us today is to identify whom the "others" were. As history progressed away from the time of the Exodus, it is a certainty that many "others" became calendar authorities for their own sects and religions.

Once it is understood that the astronomy of calendar determination is external knowledge to the Bible, then it becomes our goal to look for secular artifacts and historical evidence to answer our modern calendar questions. For example, do we accept the history which allows our calendar authority to be Hillel ben Judah, or in contrast, do we accept the history which allows our calendar authority to be the Levitical priesthood of the Temples of YHWH in Jerusalem and in Elephantine?

Genesis 1:14 and the Observed Calendar of the Second Temple Era:

The OCSTE is a very simple calendar. In Genesis 1:14 YHWH created Mowadahs (Strongs #4150). Many debate the definition of the word "Mowadah", but whatever may be its original definition, in Leviticus 23:2 YHWH specifies the calendar dates for each of His Mowadahs. In Genesis 1:14 it is the sun and the moon which are listed as the two entities by which time is measured, and the Mowadahs are established. Consider the simplicity of the OCSTE with the Genesis 1:14 criteria.

1.) Each month begins with the visible new crescent.

Some esteem the molad (the astronomical conjunction of the sun and moon as seen from the earth) to be the beginning of the lunar month. It may be argued back that the moon cannot be seen by the human eye at its molad. And if it cannot be seen, how can it then be "observed"? But this argument is unconvincing. The point is that it does not matter what we living today may argue, one way or the other. What matters is: "How did the official priesthood of YHWH determine the beginning of the months?"

In the presentation of the OCSTE, in the file Calnospo.rtf, are several tables of astronomical data. Each ancient sighting provides us with a mathematically fixed time in history, correlated to a month and day value specified in their own ancient calendar. Each observation demonstrates that they did not use the molad, but waited one to three days later. and used the new crescent as the rule for determining each lunar month.

2.) Each new year begins with the new moon crescent "of spring".

But what does it mean to be "in spring"? Is it okay as long as the Passover is "in spring", or is it that both the sun and the moon must be in spring"? Again. it does not matter what we living today may argue, one way or the other. What matters is: "How did the official priesthood of YHWH determine the beginning of their years?"

In the presentation of the OCSTE, in the file Enc202o.rtf page 29, is a quote which fully and unambiguously answers this question. Here is this quote again: Eusebius, wrote of the mathematician Anatolius of Alexander's condemnation of the changed Jewish calendar saying: "Hence, also, **those that place the first month Abib) in it (the zodiacal sign before the equinox) and that fix the fourteenth of the month by it, commit, as we think no little and no common blunder**. But neither is this our opinion only, but it was also known to the Jews anciently, and before Messiah, and was chiefly observed by them, as we learn from Philo, Josephus, and Musaeus; and not only these, **but also from those still more ancient**, …"

Here the new calendar is being condemned because it allows Abib to begin prior to spring (while the sun is still in the winter zodiac sign). This quote unambiguously identifies and then strongly condemns the "Spring Passover Rule" that many calendars, such as the Hillel II Calendar, allow.

Notice that the mathematician condemns the "Spring Passover Rule" by citing a list of ancient calendar authorities. This quotation demonstrates that any calendar which allows the first month of the year to begin while the sun is still in winter is a change from the traditional

calendar of the ancient authorities.

In contrast, in the presentation of the OCSTE, in the file Calnospo.rtf, are several long tables of astronomical sightings. The date of each sighting, spanning over 300 years of data, and without any exceptions whatsoever, all demonstrate that they began the years when the new crescent was "in spring". Further, all data points demonstrate that not even once did they ever allow a month to be Abib just because its 14th would be "in spring". They always, every single time, waited for the next new crescent to begin the year.

Thus, the simplicity of the OCSTE as it follows the directive of Genesis 1:14 is manifest. When the sun and moon both signal "spring", the year begins.

I received this email:

"Hello, . . . I do have a specific question. The first one is concerning the timing of how to calculate the first month of the year. I have been told that it should be the new moon closest to the venial equinox. That is the only explanation that I was given. What I want to know is who said that it was the one closest even if it is before?…Thank you,"

This email asks the right "first question", it asks: "Who said so?"

Since the astronomy of calendar determination is external knowledge from the Bible, we cannot answer this question: "YHWH says so". We can use the Bible for clues and for finding minimal criteria (like Genesis 1:14), but without the Bible we must admit that we are left with only human calendar authorities to choose from.

Once we make this admission, then we can proceed to search the long list of possible calendar system candidates to be our very own calendar authority we will choose to follow. It is a matter of fact that throughout history there have been (and still are) scores, if not hundreds, of different calendar variations used by the many sects of Judaism and Christianity. Remember, that each such calendar variation was somebody's chosen authority. But without the Bible, what is the criteria by which we choose a calendar authority to follow? Asking this question a different way: "Which human calendar authority will be our answer to: `Who says so?' "

Consider that the man Hillel ben Judah, the author of the Hillel II Calendar, was a man forced by circumstances to create a calendar so that any village anywhere in the world could compute the Holy Days. Contrast this authority with the OCSTE, which was the calendar used by the Levitical priesthood of the Old Testament to determine the dates they would sacrifice and perform the ceremonies within the Temple of YHWH. This calendar was not forced by circumstances, but was the calendar of choice by Israel's priesthood.

Can there be any other human criteria more authoritative than the authority of the Bible's priesthood and the Temple's sacrificial ceremonies? Since the calendar dates given throughout the Bible are also correlated to the sacrificial ceremonies of the Temple, and since the Bible is the ultimate authority, then the calendar system used in the Bible by the priests in the Temple must be the higher and the preferred authority. If we can answer the question: "Who says so?" with the answer: "The official priesthood of ancient Israel", then why would we settle for any lesser authority?

Perhaps some of the hesitation in accepting the authority of the OCSTE is that some readers are not aware of the vast extant of lands and territory to which Israel had expanded. When we read of the "priesthood of Israel" some may limit their thoughts to mean "priests living in Jerusalem". But the facts of archaeology demonstrate just the opposite. A priest of Israel could be a practicing priest anywhere, from Parthian India to Alexandria Egypt.

For example: In my calendar presentation, in the file “Elephant.rtf“, are presented dou-

ble dated Elephantine letters. Some may not be aware that Elephantine is historically extremely significant. The significance of the Elephantine island in the Nile river is that Israel had another huge and fully functioning Temple of YHWH built on this island. In this Temple the Levitical priests of Israel proclaimed and held the Mowadahs during the time Solomon's Temple was destroyed, and they held the Mowadahs in parallel with the Second Temple, until the time the Elephantine Temple was destroyed. As a matter of historical record, the demonstration that both Temples of YHWH used the exact same calendar is monumental in its significance.

Not Black, Not White, But Integrity:

Some have argued that because neither the OCSTE nor the Hillel 11 Calendar are found in the Bible, no one can judge which calendar observance would constitute "sin" or "not sin". Since it is not a matter of Biblically defined "sin", it does not matter which calendar system is used.

They continue this progression in thought to suggest that unity is more important than being technically correct. Those which would choose the OCSTE, or the Karaite Calendar, should consider the fact that the majority of people do not, and should therefore decide to go along with the majority and keep the Hillel II Calendar instead, for the sake of unity.

Even so, most of those who argue this point will concede that their argument breaks down for issues like the Sabbath and sexual morality. They will agree that a follower of the Messiah should not go along with the majority for the sake of unity for issues that clearly involve Biblically defined "sin". For example, it is agreed that to not keep the Sabbath as the Sabbath on the Sabbath would be "sin". Therefore, just because billions of other people keep Sunday does not mean that we should keep Sunday, even for the sake of unity. It is agreed that unity is not the overriding factor when it comes to issues of "sin".

But how do we, as followers of the Messiah, make decisions and judgments on matters which are not clearly discussed in the Bible? For example, "smoking". Tobacco smoking is not a subject found in the Bible, but yet many consider "smoking" to be a "sin". Why? Who says so? Point is that however you answer, you are forced to decide upon a topic not covered in the Bible. Either way, you are making a judgment without having any clear chapter and verse. Likewise with any other subject that is not directly found in the Bible.

Those who make the argument that the minority should yield to the majority on matters not discussed in the Bible, may consider that they would be compelled to start "smoking" if it happened to be that the majority in church were "smokers". You may dismiss this argument as being contrived until you re-experience second hand smoke from a room full of smokers during church services. Point is that there are non-Biblical subjects and situations when the minority should not yield to the majority even for the sake of unity.

Consider the following story:

A married man and woman are both followers of the Messiah. All of their lives they enjoyed eating tuna fish, and even though they both follow the rules for clean and unclean meats, they never even once seriously considered that tuna fish may not be a clean fish to eat.

One day the man reads some material and becomes convinced that tuna fish does not fully meet the Biblical criteria for being a clean fish. He becomes convinced that the preferred stance on tuna fish should be that it is unclean. He then decides that from that day forward he will no longer eat tuna fish.

Now, stop right here in the story and ask: "Why does a follower of the Messiah ever de-

cide to stop doing something, and opt for doing something else?" Let us stipulate that this man was a very good and righteous follower prior to the tuna fish issue. Why then does he even bother to try to implement "something else" in his lifestyle?

We know the answer to this. It is more than trying to avoid "sin". It is more than trying to be "more perfect". It is more than "our conscience". It is a matter of "self integrity". Once we become convinced to do or to not do something, it is a matter of our own integrity that we carry out our own convictions. It is part of our character development that we can be trusted to follow our own understanding and convictions.

Which of us would fully trust the man who was convinced that something was "wrong", but went ahead and practiced it anyway? Which of us would fully trust the man who was convinced that something was "right", but went ahead and did something else anyway?

We can perceive "right" and "wrong" when they are "black and white". But can we perceive "right" and "wrong" when they are matters of integrity. when they are "preferred versus discarded" choices?

Back to the story. The man shows his wife the same material. She reads and understands the material, but does not agree with her husband's conclusion. She says: "Technically they may have only microscopic scales on only part of their body, but also technically they still have some scales somewhere on their body, so therefore they are clean fish. The wife then decides that she will continue to eat tuna fish.

Now, stop here in the story and ask: "Is either the man or the woman somehow "wrong" in their choices?" They have each chosen opposite paths, at least as far as the tuna fish path. The author contends that both are "right", even though they have chosen opposite paths. Each are acting in accordance with their own integrity. Both have, with all honesty, understood the tuna fish issue and made choices which allow their conscience to not be violated.

Back to the story. One day an argument ensues between the man and woman because dinner was prepared in which the only thing to eat was a tuna fish salad. The man argues that his convictions should have been addressed, and that an alternative to eating tuna fish should have been provided. The woman argues back that two meals would be too expensive, that the man should be more conciliatory, and for the sake of unity just eat the tuna fish like she does.

Now, at this point in the story we have the man faced with the same situation as are those who prefer to keep the OCSTE. They are convinced that one course of action is their preferred choice, but are challenged that for the sake of keeping unity they should just do what everyone else is doing.

The author argues that this situation distills down to being a matter of trust. Which of us would ever completely trust the man in this story, trusting him to always do the right thing, if he gave into the situation and ate the tuna fish? It is not a question of "right" and "wrong" as in "black and white". It is not even a question of "sin". It is a question of integrity and trust. If the man is truly convinced that tuna fish is unclean, than that man should not eat it.

Most readers can relate to having conscience pangs, even calling it sin, if they compromise and eat what they believe they should not eat. But how is it that this analogy is the same as a preferred choice regarding the calendar? Is the calendar now equal to sin? The answer is not "sin", the answer is "in the mind's eye".

We are talking about a preferred choice, a choice not directly found in the Bible, but still a choice none the less. At some point in time, in the man's own mind, he begins to feel that he cannot compromise or go back on that choice. This is not a judgment of "sin" against the woman of the story, but it is a judgment of trust and integrity for the man of the story.

If you do not like the story about tuna fish, then imagine a similar story about chocolate versus strawberry ice cream. Its still the same point. If, in the mind of the man, he is fully convinced that his personal preferred choice is to not eat chocolate ice cream, then the woman of the story is "wrong" in asking him to violate his own conscience.

This analogy does not apply to the person who is not fully convinced to keep the OCSTE. Not being fully convinced, they can decide to keep it or not to keep it and feel no serious pangs of conscience. However, the point of the story, is that for those people who are fully convinced to keep the OCSTE, that to ask them to go back and to keep something else anyway, even for the sake of unity, is the same as asking them to eat the unclean. At some point in time, in the mind of the man of the story, and in the mind of the man who is fully convinced to keep the OCSTE, the pangs of conscience are too serious to violate.

Also, further consider that the man of this story must decide to not be conciliatory. He must decide to break unity. He must decide to do what he is convinced is the right thing to do, even while everyone else may decide otherwise. If he does, at least this man can be trusted to always do what he is convinced he should do.

But consider the harsh and damming accusations that will be made against this man when he does decide to follow his own convictions. It will be said that he is causing disunity. He is spreading discord. He is being defiant to authority. He is a bad follower of the Messiah. Whether you consider these accusations true or untrue depends upon your point of view. Are you the one wanting him to go ahead and just eat the tuna fish, or are you the one convinced to not eat the tuna fish.

In contrast, it must be pointed out that the woman in this story should be reprimanded for being so self absorbed that she would ask another follower to break their conscience and trust worthiness just to follow her. After all, this is really the bottom line? Who will the man in this story follow? His wife, the group, or his own integrity?

Why use the term "self-absorbed" to describe the woman's position? Just ponder who she is really concerned about?

Those who are truly convinced that the OCSTE is the preferred calendar, really have no other alternative than to follow their own convictions. Others who do not agree need to look beyond themselves, and be concerned for the eternal value of those who choose differently. Those who disagree should at least allow the OCSTE followers to demonstrate their own self integrity and trust worthiness, and to do so without the damming accusations.

Dishonest Criticism:

Some have criticized the OCSTE because its rules cannot be directly found in the Bible. If chapter and verse are the sole criteria for judging the validity of a calendar system, then it is only fair to apply the same criteria to the Hillel II calendar they are following. For example, where are the postponement rules of the Hillel II calendar found in the Bible? Where does the Bible say that the Hillel II Calendar can slowly slip away from being in synchronization with the seasons? If the acceptance criteria you set up forces you to discard one calendar system, then it is only honest that you discard the other calendar systems which also cannot meet your criteria. It is being dishonest to discard the OCSTE for not meeting an arbitrary set of acceptance criteria, but then to also not discard the Hillel II Calendar which also does not meet this same set of criteria.

It is understood that the following assertion is very hard for many to accept, but at some point the following assertion must be stated and then addressed.

Consider what is actually being accomplished by insisting that the sole criteria for accepting or discarding a proposed calendar system is that the proposed calendar system's rules must be found somewhere in the Bible. By insisting on this, what is really being done is to force the acceptance criteria to remain open to human interpretation. And. here is the hard part, by forcing it to be open to human interpretation, anyone ran claim to be a calendar- expert. This may sound harsh, but ponder this for awhile and you will understand that it is the blunt truth.

Those who can keep the objective historical evidence (like hundreds of years of astronomical sightings, historical references, and double dated letters) away from being allowed as the acceptance criteria, and can keep the Bible as the only acceptance criteria, can then retain their own calendar expert status, as one mans interpretation sounds just as good as the next man's interpretation. This then keeps the calendar debates going on endlessly.

It is a matter of fact that when one person cites chapter and verse, for example proclaiming that the barley harvest must be a criteria for the calendar, that numerous other people will immediately jump up in disagreement about the interpretation or the application of that scripture. In contrast, objective historical evidence cannot be argued, as it exists and is real data. Objective historical evidence can only be evaluated.

From this point of view it is possible that for this very reason YHWH decided that the astronomy of calendar determination must be external knowledge from the Bible. For if YHWH taught us astronomy in the Bible, we humans would then interpret and apply those verses into thousands of calendar sects. At least by having the astronomy of calendar determination external from the Bible, we today have only a few truly authoritative choices to consider.

Looking In A Mirror:

For those who argue for unity in sacrifice of integrity, consider turning the situation around. What if almost everyone started to use the OCSTE, and you were one of the few "holdouts". Would you like it if we insisted that you were a bad person because you would not just go along with everyone else and keep the feast a month later this year?

Also, use the above mirror-perspective to better evaluate in your own mind how much of your decision to stay with the Hillel II Calendar is merely a matter of "resistance to change", more than it is a matter of truly disagreeing with it.

Also, please re-read` Romans 14:1-12 from within the context of the calendar issue. Ii is not suggested that these versus were written with the calendar as the context, but they still provide us with a very valuable perspective on how to handle diversity.

Whichever calendar system you decide to follow, it is important that you demonstrate integrity, and follow your own convictions.

The Observed Calendar
of the Second Temple Era
Presenting The Preponderance of Evidence

Tell Me Quickly What You Want To Tell Me ?

It is time for Christians and the Churches of God to switch calendars. This presentation provides objective historical evidence of a single authoritative calendar that was used by ancient Israel and the priests of the Second Temple. This observed calendar was the only official calendar of Israel, and was used for at least 590 years. This observed calendar is the more authoritative choice, and should be used today.

This presentation will establish the existence of the observed calendar, will document the calendar's rules, and that it was the official calendar of Israel between 520 BC and 70 AD. This observed calendar is the calendar used by the Bible's scribes, Jerusalem, the Second Temple's priests, the Messiah, and the early Church, and therefore is the preferred calendar authority for us today.

This presentation will establish that the current Jewish Calendar was created, did not exist prior to 390 AD, was not widely used for at least nine generations after 390 AD, and was only intended to be a temporary measure in reaction to severe persecutions and the loss of consistent communication. This presentation will claim that the temporary measure of Hillel ben Judah is no longer needed.

This presentation will claim that a switch should be made from the 390 AD authority, to the older and preferred calendar authority of the Second Temple Era used in the Bible. The conclusion will ask the reader to agree that the observed calendar of the Second Temple Era was the preferred calendar of ancient Israel, and therefore is the preferred calendar for modern Christians. This ancient observed calendar is the calendar we should use today to determine the dates of YHWH's Holy Days for observance.

Road Map:

To establish the author's tenets and claims this presentation will present evidence and answer objections. Because none of us today were living in ancient Jerusalem, all we really know is what we read. For this reason this presentation will not claim proof, but rather will rely upon presenting an overwhelming preponderance of objective historical evidence. This presentation will present so much interrelated and collaborating evidence that there can be only one logical conclusion, which is the author's tenets and claims. **This means that only by absorbing and evaluating the entire presentation of evidence will the reader conclude that all of the tenets, claims, and conclusions are substantiated.** No tenet or claim can or will be completely substantiated in any one section or document.

Because this presentation will bandy dates spanning hundreds of years, in order to better keep these large time spans in perspective, dates will often be followed by the number of generations being represented. Generation #1 starts in 520 BC, Generation #2 starts in 500 BC, and so forth. Thus, this presentation asks the reader to use the same observed calendar that was used by ancient Israel and the priests of the Second Temple for at least 590 years, that is for at least 30 generations.

The Preponderance Of Evidence is presented across these documents:

Enc202	This document, the primary presentation.
Vat4096a	Example of how ancient artifacts and documents are analyzed in order to deduce their authenticity, historical date, and application to determining the rules of their observed calendar.
Elephant	Author's reconciliation of the twenty-one double dated Elephantine Let ters. Essential for demonstrating that the entire Persian empire, and greater region, used the same calendar rules as Jerusalem.
CalNoSpo	Historical evidence that the alleged "Spring Passover Rule" was never used by the Second Temple's priests. Essential for demonstrating that the observed calendar's rules were consistent and match the historical record.
Bab-530	Author's reconstruction of the Second Temple Era's observed calendar from 531 BC through 377 BC. Essential for demonstrating that the observed calendar's rules were consistent and match the his torical record.
DateLine	Explanation of how to administer the observed calendar in a global circumstance.
Bend2000	Listing of new crescent dates for the observed calendar as observed in Bend, Oregon from 2000 through 2015 AD.

All documents and GOTO links are required reading to substantiate the author's assertions and claims. However, the more casual reader may derive the same conclusion as the author by only reading the overview of this document.

There is a huge amount of information in this presentation. It is not a matter of reading the material, it is a matter of comprehending the material. To help simplify the task of comprehension, this document is written in a non-standard format. It is written in such a manner that the reader is expected to skip reading the details until they want to read them.

To obtain the OVERVIEW: Read from here to the "Conclusion", to about page 13, and do not click on any of the GOTO links. Do not even read the GOTO text, just ignore all links and their text. Read the overview as often as you like. Do not forget to read the footnotes. Eventually you will be comfortable enough, and curious enough, to click for more details.

Think of the GOTO links as bouncing down to read some specific details about a specific topic, and then being able to bounce back to continue on reading the overview. Some GOTO links are large sections, but at the bottom of each link is a "BackXx" hot-spot. Click on the "Back above" hot-spot and it will bounce you back to where you came from.

There are also links to the other documents. Clicking on these links will bring up a window with "that" document open. These documents are major sections, devoted to presenting highly technical details for scholarly and serious study. Not everyone will feel it is necessary for them to study these documents.

THE PRESENTATION:
Why does the Calendar Issue Even Exist ?

The issue of determining which calendar to use cannot be avoided. In Genesis 1:14 YHWH created Mowadahs (Strongs #4150). Whatever may be the definition of a Mowadah, in Leviticus 23:2 YHWH commands the calendar dates for each of His Mowadah. Thus YHWH established a calendar of events, pinning each of His Sabbath Mowadahs to a specific day of a

specified month. Everyone who strives to observe YHWH's commanded calendar of events must choose which calendar to follow.

Even though you personally may not decide which calendar to follow, your group or church leaders must still decide. Every group, congregation, and Church of God has someone who is responsible for telling everyone else when the Holy Day services will be held. They must decide, whether it be complicated or easy, which calendar authority they will use to set their group's Holy Day services.

Why not just use the Jewish Calendar ?

Most observers of YHWH's Holy Days currently use the "Jewish Calendar". To state this more accurately: most Holy Day observers use the calendar of the Jewish Rabbinical Tradition, published by Hillel Ben Judah circa 390 AD [1], and is formally called the "Hillel II Calendar"[2]. However, there are five primary reasons why the Hillel II Calendar is being challenged:

1. When the Hillel II Calendar was first published, it was categorically rejected by most Jewish communities in Asia Minor / Persia. Instead, most of the Jewish and Christian communities ignored Hillel ben Judah's Calendar, and for at least the next 400 years, over 20 generations, continued to use an observed calendar.

Evidence demonstrates that the Hillel II Calendar did not become widely used in the west until after 800 AD, around Generation #66. In this timeframe the Karaite Jews were established. The Karaite Jews rejected the Rabbinical Tradition, the Mishnah, Talmuds, the Hillel II Calendar, and to this day follow an observed calendar[3].. Even today many Jews are neither Karaite or Rabbinic, and use an observed calendar. This history directly challenges the claim that the Hillel II Calendar is the "Only Official Jewish Calendar".

<GOTO: Rabbinists Changed Calendar While Others Retained Original below Back2 >

2. The Hillel II Calendar's rules did not exist prior to its publication, and was never historically used for official Holy Day determination by the Second Temple's[4] synod Not previously existing prior to 390 AD means that any official calendar authority that is discovered which predates the Hillel 11 Calendar is immediately considered to be the preferred calendar authority. Since the observed calendar rules used by the Second Temple's synod have been discovered, the Hillel If Calendar is superseded.

1.Jewish Encyclopedia, Vol. 3, 1901 article “Calendar”: gives the date as 359 CE, but clarifies that the date is not known with certainty. Other Jewish scholars date its publication as late as 500 AD. Since the Mishnah and Talmuds, finished circa 550 AD, do not even hint at the Hillel II Calendar, it is reasonable to conclude that the calendar may have been published near 390 AD., but was not widely used until after 550 AD.

2.The Comprehensive Hebrew Calendar: Pages 1-2. **“Using the calendar methods defined by a special committee, called the Calendar council (Sod Haibbur), Hillel ben Judah formally sanctified all months in advance, and intercalated all future leap years (bissextile years), until such time as a new, recognized Sanhedrin would be established in Israel.”**

3.The Karaite calendar is the same as the original observed a calendar, with the exception of their definition for intercalating a year. Rather than use the equinox, they use a literal meaning of the original name of the first month, “green ears” of barley. They therefore wait for the new crescent in which green ears of barley are present. Later in history, the Karaites split, one group retaining the “green ears” definition, while the splintering group went back to the original equinox definition

<GOTO: Official Hillel II Book Acknowledges Original Method Was Observed below Back5 >

3. The Hillel II Calendar is a calculated calendar, based upon astronomical averages for the solar and lunar cycles, assigns certain months with a fixed number of days, and applies "postponement rules" which shift the first day of the 7th month and Atonement. To many this computing method is contrary to the Biblical statements of Genesis 1:14, which declare that the sun and moon are to be used to determine the Mowadahs.

4. The Hillel II Calendar's assumed astronomical averages have now accumulated a significant amount of error. Since the time it was first published, the spring and fall equinoxes have shifted 7.6 days. The rules of the calendar never synchronize to the equinoxes. What this means is that within every 19 year cycle, for about ¼ of those 19 years, the Hillel II Calendar is calculating the 6th month to be the 7th month, thus placing Trumpets, Atonement, and the Feast of Tabernacles a full month too early. For example, in the year 2002 the fall [5] Holy Days are scheduled in the summer.

5. The Hillel II Calendar is no longer needed Even in its prolog the Hillel II Calendar is presented as being only a temporary calendar. Quoting "The Comprehensive Hebrew Calendar", on page 2: **"Hillel II formally sanctified all months in advance, and intercalated all future leap years, until such time as a new, recognized Sanhedrin would be established in Israel".** Because of the intense persecution against the Jews, many Jewish communities became isolated. Hillel Ben Judah created a new calendar based upon calculations so that even the isolated communities could keep the new moons and Holy Days on the same days.

However, today we are not isolated Hillel ben Judah's temporary measure is no longer needed. We can return to the original and preferred method of using the observed calendar. Today we have computers, telephones, and the Internet. Today we can run a computer program to compute the astronomical conditions required to determine the original calendar. Today all communities worldwide can be unified using the original rules of the observed calendar of ancient Israel and the Second Temple's priests.

But won't rejecting the Jewish Calendar cause disunity ?

Disunity will be avoided by directly switching to a more authoritative calendar than the Hillel II Calendar. Through modem archaeology we are able to firmly reestablish the same calendar rules that was used by the Second Temple's priests from 520 BC through 70 AD. This calendar system, being much older than the Hillel II Calendar, and actually being used by the Bible and the Temple's priests to observe the Holy Days, represents a single unifying authoritative calendar choice that all may agree upon.

If through objective archaeological evidence you become convinced that you could follow the exact same calendar as was followed by Ezra, the Second Temple's priests, the Bible, the scribes who recorded history, the Messiah, and the first century Christians, then why would you not change calendars?

It becomes the same question you had to answer when you first started keeping the

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4. Ezra 6:15: Second Temple is finished on Adar 3, in the 6th year of Darius, 516BC.

5. The Term “Fall Holy Days” is not in the Bible. The author asks the reader to review the list of harvest items that were apart of the Feast of Ingathering. Although harvesting times very by region, few farmers will assert that these crops are harvested in the late summer. Secondly, the astronomical data confirms that a 2nd 6th month was always inserted to keep Atonement in the autumn.

Sabbath. Yes, your decision probably caused disunity within your family and circle of friends. But you still decided to start observing the Sabbath because you knew it was better than what you were doing before. Once you became aware of the Sabbath as the preferred choice, you understood that unity was not the overriding concern.

The rules for the ancient observed calendar are simple, much simpler than the Hillel II Calendar's rules. Everyone, all of the members of the Churches of God, will have no difficulty in understanding and unifying using the observed calendar.

How can you reestablish this older calendar authority ?

Through archaeology and historical research the following statements may be firmly establish as facts:

1. Before 70 AD: Only a select few were allowed to be educated to be astronomers and calendar experts. These select few were educated at elite academies. These academies were established throughout Asia Minor, Persia, and Palestine. Graduates were priests and scribes, and officiated in the courts of the kings and governors in the regions in which they lived. Graduates from these academies also served as priests at Jerusalem. It was the astronomy scholars who were responsible for determining the calendar. It was the Sanhedrin who was responsible for administering the decisions of the astronomy scholars. The Sanhedrin did not decide the calendar. Rather the astronomy scholars of the synod made the calendar determinations.

<GOTO: Calendar Experts Were Highly Educated Elite below Back9 >
<GOTO: Abraham Taught Egyptians Astronomy. Fought Astrology below Back22 >
<GOTO: Sanhedrin Was A Governing Body Started 57 BC below Back10>
<GOTO: Calendar Synod Was Separate From The Sanhedrin below Back 11>

2. Before 70 AD: As suggested in the book of Daniel, historical documents have been uncovered which confirm that there has always been a major distinction between the astrologers and pagan priests, from the astronomers, scribes, and YHWH's priests. They co-existed, they attended different academies, but the astrologers were always esteemed to be the lower class. For example, in Babylon the higher class astronomers would not even greet a lower class astrologers on the street. In Jerusalem the astrologer could be stoned to death.

<GOTO: Astronomy Versus Astrology below Back35 >
<GOTO: Babylonian Astronomers Were Not Astrologers below Back12 >
<GOTO: Magi Were Babylonian Astronomer Priests Not Astrologers below Back24>
<GOTO: Answer: Babylonians Were Pagans And Their Calendar Was Pagan below Back38 >

3. Between 520 BC and 70 AD: Daniel was made overseer of the king's court. This also included the astronomers and priests. Through Daniel the observed calendar used by Israel became the calendar of the Babylonian and Persian empires. By the time of Ezra[6] the same observed calendar was used throughout the Persian empire, from India to Egypt.

<GOTO: Scholars Determined Calendar, King Made Official, Letters Sent Out be low Back14 >
<GOTO: Entire Greater Region Used The Same Observed Calendar below Back17>

6.It is outside of the scope of this presentation to debate the year in which Ezra 7:6-9 occurred. Elephantine Letter C17 shows that Darius-I was also called Artaxerxes. The 7th year of Darius-I is 515 BC. Certainly Ezra 6:15 places the Second Temple circa 516 BC.

<GOTO: Persian King Issues Passover Edict: below Back31>

<GOTO: Observed Calendar Used For At Least 30 Generations below Back3 >

4. Between 520 BC and 163 AD: Ezra setup academics that educated each generation of astronomers and priests for Israel. The Sadducees were those of the nobility and priesthood It was the Sadducees that were the graduates of the academies of Ezra, and knew the secrete rules of the observed calendar. It was the Sadducees, not the Pharisees, that were responsible for the official calendar which was used to administer the new moons and Holy Day ceremonies in the Second Temple in Jerusalem.

The eastern Jewish communities were religiously tied to Jerusalem, politically powerful, and unhindered by the ruling government. The eastern communities kept the same observed calendar and Holy Days as those in Jerusalem and Palestine. The signal fires which were lit in Jerusalem in accordance to the observed calendar, which was the responsibility of the Sadducees to determine, were also unhindered and welcome in Babylonia/Persia. Because the same priesthood-graduates lived throughout the greater region, and with the signal fires for communication, the entire greater regions was enabled to keep the exact same observed calendar and Holy Days as Jerusalem. This synchronization was predominant from the time of Ezra until at least 163 AD.

<GOTO: Sadducees Were The Temple's Official Calendar Authority below Back26>

<GOTO: Sadducees Came From Aristocratic and Priestly Families below Back37 >

<GOTO: Babylonian/Palestinian Calendar Authorities Diverging In 163 AD below Back13 >

5. Between 520 BC and 70 AD: Because the Babylonian and Persians used the same observed calendar as did Israel[7], the ancient astronomy and historical data from Babylon and Persia can be used to discover the rules of the observed calendar used by Israel during the Second Temple Era. This claim is substantiated in these three documents:

<For technical studies see: Elephant.rtf >

[Observed Calendar Rules same in Jerusalem, Egypt, and Babylon from 485 to 351 BC]

<For technical studies see: Calnospo.rtf >

[Observed Calendar Rules same in Babylon / Persia from 568 to 4 BC]

<For technical studies see: Bab-530.rtf >

[Observed Calendar Rules same in Babylon / Persia from 531 to 378 BC]

<GOTO: Current Sabbath 7 Day Cycle Has Not Been Broken below Back25>

[Observed Calendar Rules same in Jerusalem and Babylon in 587 BC and 70 AD]

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7. There is much over emphasis on the importance of the "pecking order" for the scholars living in Babylon verses the scholars living in Jerusalem or Palestine. The rules for calendar determination are not that complicated. Rather what happens is that there are years in which the moons' cycle is so close to an intercalary rue that sometimes the "leading astronomer" must be consulted to make a determination for the whole. It is simply unimportant where the "leading astronomer" is living in the year of a close call. Where they live and where they convened to make a decision is simply not important. What is important is that the historical evidence demonstrates that they did cooperate, they did convene, they did communicate, and they did try to work things out in order to keep the greater region unified with a single calendar.

<GOTO: Observed Calendar Was Being Used In 4 BC below Back29>

[Observed Calendar Rules same in Jerusalem in 4 BC]

<GOTO: Observed Calendar Of Jerusalem Was The Calendar Of Asia Minor below Back41 >

Once all of the details of the above technical study documents, and the above links, have been comprehended, the result is an overwhelming preponderance of evidence; that the Second Temple Era used a closely guarded, regionally applied, and consistent calendar.

6. Between 70 and 200 AD: After the destruction of the Second Temple in 70 AD, the Sadducees, being so dependant upon the existence of the Temple and the administration of the priesthood's daily duties, as a political force ceased to exist. The Pharisees immediately established themselves as the new Sanhedrin and central authority of Israel, including the office of the Nasi which determined the official calendar.

<GOTO: Pharisees Gained Control After Temple Destroyed In 70 AD below Back34>

<GOTO: Sanhedrins After 70 AD Were The Pharisees. Sadducees Are Gone below Back36 >

<GOTO: Rise Of Pharisees In Persia After 135 AD: below Back33 >

7. Between 70 and 116 AD: The Pharisees did not immediately change the rules to the observed calendar. The observed calendar remained consistent throughout the early Christian Church.

<GOTO: New Moon Announcements Made Without Jerusalem Sanhedrin below Back16 >

<GOTO: Calendar Rules Consistent From Generation To Generation below Back18>

8. Between 70 and 550 AD: New generations of Pharisees slowly inserted new calendar rules. Most of the inserted rules dealt with close-calls and additional criteria for determining when to intercalate a year. However, even with the new rules the calendar used by the Pharisees was still primarily the same original observed calendar of the Second Temple Era. It was still an observed, not a calculated, calendar.

<GOTO: Mishnah and Talmud Written By The Pharisees below Back27 >

<GOTO: Talmud Preserves Observed Calendar. Including 2nd 6th Months below Back21 >

9. Between 350 and 390 AD: However, due to very severe persecutions from the Roman Christians many western Jewish communities were cutoff from having consistent communication with the Palestinian Sanhedrin. Hillel ben Judah, as High Priest of the Sanhedrin, decided to create a computable calendar so that all Jewish communities could determine for themselves the new moons and Holy Days.

<GOTO: Original Calendar Academies Still Existed In 350 AD below Back4 >

<GOTO: Hillel Calendar Was Temporary Reaction To Christian Persecutions below Back19 >

<GOTO: Tradition Says First Month Is Never In Winter below Back20 >

<GOTO: Mishnah/Talmud Saturated With Examples Of Observed Calendar below Back6 >

<GOTO: Mishnah/Talmud Saturated With Examples Against Postponements below Back7 >

<GOTO: Passover Dates Of 343 AD Not From Hillel H Calendar below Back28 >

<GOTO: Hillel II Calendar's Foundational Tenets Were Fabricated below

Back32 >

<GOTO: Hananiah Was Ruled Wrong. So Therefore Hillel Was Wrong below Back15

10. Between 390 and 550 AD: The Hillel II Calendar, although published, was not used by the Rabbinical Sanhedrin until sometime after 550 AD. The Talmuds confirm that an observed, not a calculated, calendar was still being used at least as late as 550 AD.

<GOTO: No Trace Of Original Hillel II Calendar In Talmud below Back l >

<GOTO: Answer: Are Not The Jews In Moses' Seat below Back39 >

11. Between 550 and 1200 AD: However, due to the persistent Christian persecutions against the Jews in Europe, the Hillel II Calendar slowly began to be used instead. By the time of Rabbi Maimonides, who lived circa 1200 AD, it was well established in Europe and Alexandria Egypt.

12. Between 800 and 1200 AD: Even though the Hillel II Calendar was gaining in use by the Rabbinical Tradition, it was never accepted by all Jewish communities. Circa 800 AD the Karaite Jews rejected the Rabbinical Tradition and the Hillel II Calendar, and continued to use the customary observed calendar. This demonstrates that even as late as 800 AD an observed calendar, not a calculated calendar, was still considered to be the customary calendar of Israel.

< http://www.karaite-korner.org>

13. From 1200 AD and after: By the time of Rabbi Maimonides the Rabbinical and the Karaite Jews were entrenched in opposition. Even in the same city the Rabbinical and the Karaite Jews each had there own separate communities and schools, and did not allow marriage between each other. Even today each group proclaims and keeps their own Holy Days.

14. The preponderance of objective historical evidence combine to identify the existence of an official observed calendar used by the Second Temple's priests and the early Christian Church. The evidence demonstrates that the preferred calendar of ancient Israel was to use an observed calendar, not a calculated calendar. The evidence also shows that various forms of an observed calendar were used by Israel after the Second Temple. This means that from at least 520 BC to at least 800 AD, which is over 67 generations, some form of an observed calendar was the authority. It is an observed calendar which is the preferred choice. The rules of the observed calendar of the Second Temple Era is known. This calendar is the older and the official authority of the Temple, and therefore supersedes the authority of the 390 AD Hillel II Calendar.

What about all of the other calendars ?

Other calendars are not important to this presentation. By switching from the Hillel II Calendar authority of circa 390 AD directly to an older authority circa 520 BC, we are advantageously jumping overall other calendars in between, and after.

Through archaeology it is discovered that scores of other calendar systems were used by different Jewish communities. For example, the Essenes and other groups identified in the Dead Sea Scrolls each used a different calendar. This means that these splinter groups watched the priests of the Second Temple perform their duties on the Holy Days, while they disregarded those days in preference for the Holy Days they proclaimed.

But their calendars are not important because they were not official. The only calendar of importance is the calendar actually used by the Temple priests. It was they who had the authority and responsibility to declare the new moons, blow the trumpets, sacrifice the animals,

and provide Israel with the Holy Day ceremonies. Today, for those who observe the same Holy Days, only the calendar that the Temple priests used is of any importance. All others are only of academic interest. **Identify the calendar that the priests used, and we have identified an authoritative official calendar we all can use today.**

How can you reestablish this older calendar authority's rules ?

The ancient astronomers observed an astronomical event in the sky, recorded the date of the event according to their own calendar, and then went about their business. Today we can read their recorded event, and then calculate the Julian date that the astronomical event they saw actually occurred. From this we can derive with certainty the exact rules they used to determine their own calendar. We are not guessing, we are letting them tell us their rules.

For example: one artifact describes an event, a new crescent seen after sunset, that occurred in the 37th year of Nebuchadnezzar II on the first of Nisan. From this account it is immediately known that they started that month beginning the night of the visible crescent, and not the Molad (the moment when the sun, moon, and earth are all aligned). If it were from the Molad the event would have been recorded as Nisan 2 or 3.

<GOTO: Definition Of New Moon below Back8 >

Additionally, by other evidence it is known that his 37th year places this crescent to be on the night of (Julian Calendar) April 22, 568 BC. From this it is known that they did not use the alleged "Spring Passover Rule"[8], but rather intercalated an Adar II that year. That is, the previous month was declared to be a 2nd 12th month, because that previous month's crescent occurred in the winter, four days before the spring equinox. It was still winter, so they waited a full month for the next crescent after the spring equinox.

This is an example of analyzing just one recorded ancient event. >From this single event two rules have been deduced: months begin with the new crescent, and years begin after the spring equinox.

By performing similar analysis on another second recorded event, it is discovered that they used the same rules. By applying this same analysis on hundreds of other recorded events, spanning over 500 years, it is discovered that they were consistently using the exact same calendar rules.

(To see an example of how this analysis is actually done: head: Vat4956a.rtf .)

By analyzing ancient astronomical events recorded in other regions, such as in Egypt and in Jerusalem [9], it is discovered that the exact same calendar rules were also used in each of these regions, with no deviation.

This discovered consistency is considered quite logical because history records that those responsible for providing the ancient calendar's dates were all scribes, priests, and astronomers who graduated from the same line of elite academies. In fact most were blood relatives.

8.This is a title used to refer to the idea that the new year's first month's new crescent can be in the winter, as long as the 15th of that month (which is the Passover) falls in the spring. This "alleged rule" is not mentioned in the rules of calculation for the Hillel II Calendar, nor was this "alleged rule" used by the official calendar of the Second Temple.

9. The Book of Calendars. Frank Parise, ed. Copyright 1982 to Facts On File, Inc. 460 Park Av. South, New York, NY 10016. ISBN 0-98196-467-8. Page 3, quote **"Its** [the calendar taught by the Babylonia academies] **influence extended from Greece and Egypt in the West, down the Arabian peninsula in the south, over to India in the East, and northward into the Himalayas."**

(For the highly technical details, See: Calnospo.rtf and Elephant.rtf and Bab-530.rtf)

From this preponderance of objective historical evidence it can be stated that the calendar rules, used by the academy graduates for at least 30 generations, is known. Other documents demonstrate that variations of the Second Temple's observed calendar were used all the way up into the Middle Ages.

Thus analysis has identified an ancient, authoritative, and official calendar, maintained by generations of elite academy graduates, used by the Second Temple's priests from 520 BC through the time of Yahshua and early Christian Church. At least 30 generations were born, lived, and died using this single official calendar system.

If only a few ancient events were found to analyze, it could not be said with any conviction that their calendar rules were understood. If some events were found which conflicted with the previous analysis, lingering doubt would have to be admitted. But the fact is that there are hundreds of matching events. All events match the exact same calendar rules, there are no exceptions[10]. There are data points which introduce doubt.

With this much consistency in evidence it can be stated that we know the calendar rules they employed. Further, since the astronomical evidence spans over 590 years of the Bible (30 generations) and the historical evidence after the Messiah spans over 1200 years (another 60 generations), we can be confident that we have identified an authoritative calendar to supersede the temporary calendar of Hillel Ben Judah.

What are the rules of the ancient observed calendar ?

They are very simple:

1. The day begins at sunset, with a seven day weekly cycle. The Sabbath and weekly cycle have never been disrupted.

2. The month begins upon the observation[11] of the new crescent, or if obscured, the month begins after sunset of the 30th day of the previous month.

3. The "First Month" is a declared title, not a count[12]. The "First Month" is declared to

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10.Some may cite records of Greek and Roman government officials arbitrarily deciding to adjust their local calendars as they please. But we are not interested in the Greek and Roman calendars. They are not our authority. Their calendar systems were not the same calendar system as determined by the official academies. The calendar adjustments of the Greeks and Romans are not relevant to the Temple's official calendar.

11.Observation means that someone is standing at a fixed location on the earth, and is visually verifying that the expected (by calculations) new crescent is visible. The term "observation" does not mean that calculations and predictions were not employed. There are massive numbers of clay tablets to verify that the astronomy scholars computed in advance the expected dates for the beginnings of the season, eclipses, and when each new crescent should be visible. However, they did not rely upon the calculations, but relied upon actual observation before making any official proclamations. They relied upon their calculations only when conditions were too poor for visual verification.

12.A title is a name given to something. The priests declared a month to have the title "First Month" or "Seventh Month". A count is a sequence. Months were not named sequentially because one followed the previous. This concept may seem strange to our western thought process.. We are taught to always number things in sequence. But in the ancient world things were called what they were called because someone in authority declared it to be so. For example, Joseph was declared to be Jacob's firstborn in terms of inheriting the birthright, even though Joseph was not sequentially the firstborn of Jacob.

be the "First Month". It is the first new crescent after the spring equinox [13]. This results in some years having two 12th months declare

4. The "Seventh Month" is a declared title, not a count. The "Seventh Month" is declared to be the "Seventh Month". It is the first new crescent in which that month's 9th day is after the fall equinox[14]. This results in some years having two 6th months declared For example, the year 2007 will have a 2nd 6th month.

5. In the years in which the expected[15] first or seventh months fell too close to the expected equinox, the leading astronomy scholars would exchange letters or meet together, seeking to "Unify all Israel" with a common decree. By the time the close-call occurred, everyone knew the procedure they would follow to determine [16] if there would be any intercalation [17].

(As a reference, Read: "Observed Calendar Dates For 2000 - 2015 AD": Bend2000.rtf)

<GOTO: Do We Observe Crescent Over Jerusalem Or As It Comes To Us below Back40 >

But what authority do I have to switch calendars

It is not a matter of having the authority to switch. It is a matter of having the responsibility to choose. Someone must chose which calendar authority to follow, whether that be yourself or someone within your group. Even if you are making the choice yourself, you are probably also making that choice for your own family and perhaps a small group of friends.

Someone must chose which calendar authority to follow. Even if your group uses the Jewish Calendar, it is you and your group that agrees to follow that decision. Even if your group uses the observed calendar, it is you and your group that agrees to follow that decision. Whether the decision effects only yourself, or a group, it is you whom is being trusted to make the best choice that you can.

13.The ancient definition of "equinox" is a complication. This complication is not important unless the new crescent is within two days prior to the spring equinox. Using the modern astronomical definition for equinox will work fine for mot years.

14. The ancient definition of "equinox" is a complication.. Using the modern astronomical definition for equinox will work find for most years.. This rule shows that the ancient priests though it very important to keep Atonement and the Feast of Tabernacles in the fall season.

15. The ancient astronomy scholars used mathematics to calculate the moon's expected appearance and eclipses.

16.Close-calls are complicated when the sun and/or moon are obscured. Accurate measurements are not possible, and the visual sighting of the new crescent may not occur. The ancient astronomy scholar developed procedures to follow if ever such ambiguity prevented them from making a declaration based upon astronomy. For example, they might look at the barley harvest, a pigeon molting, rain conditions, and other natural cycles as additional evidence for spring and fall. The Talmuds talk about such contingency procedures, but we have no record of the Temple's observed calendar every being overridden by physical concerns. For example, there is no record of the Second Temple's priests saying: "This should be the first month, but the roads are wet, so we are intercalating the year instead."

17.Intercalation is done in order to keep certain of the Holy Days in their seasons. Intercalation is the result of determining that a specific new crescent occurs too soon to be declared as the 7th or 1st month, and so, the new crescent is instead declared to be 2nd 6h or a 2nd 12th month, thereby allowing the 7th or 1st month to occur one month later.

Conclusion

Today, through archaeology, we have enough objective historical evidence to firmly identify and establish the official calendar authority used by the Bible's scribes and the Second Temple's priests. This being the case, the two choices you now have are whether to follow the authority of the temporary calendar of Hillel Ben Judah, or, the more ancient calendar authority used by the Second Temple's priests, the Bible's scribes, Israel, the pilgrims to Jerusalem three times a year from other lands, and the early Christians.

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Objections And Answers:

The Babylonians Were Paeans And Their Calendar Was Pagan:

Objection: Everyone knows that the Babylonian priests were pagan astrologers. Scripture says: "Come out of her my people". You are asking us to follow a pagan Babylonian calendar.

Answer: One of the most difficult tasks this presentation must accomplish is the reply to this objection. Most readers have been taught an anti-Babylonian bias. How can the author overturn everything the reader has been taught about the Babylonian's connection with sorcery? Most readers have been taught that anything and everything labeled "Babylonian" is automatically pagan. Most readers have been taught that anything and everything associated with "Babylonian Astronomy" is automatically "Astrology".

However, in the specific topic of the observed calendar after 520 BC, and the priests which determined the "Babylonian Calendar" for the Babylonian/Persian kings after 520 BC, the reader is asked to reevaluate their bias based upon the following evidence:

1. A calendar is not a religion. Astronomy is not astrology. A calendar is independent of how a religion may decide to use it. For example, the astronomers declare that today is the first day of the year. This pronouncement makes no religious claims. One religion may use this information to sacrifice chickens, while another religion may use the exact same information to have a day of rest.

2. The evidence shows that it was Abraham and his family descendants who became the astronomy priests of the greater region. Whether the astronomy experts were pagan or righteous makes no difference as long as the calendar rules they used were consistent. For example, two astronomers, one pagan the other righteous, declare that today is the first day of the year. As long as both use the same calendar rules, their religion is a separate topic from the calendar. Thus, even a pagan priest can use astronomy to declare the observed calendar.

3. The evidence shows that the observed calendar far predated Babylon. In fact it even predated the Exodus. Astronomy records were kept in libraries, and these records dated back to circa 1650 BC. Further, notice that calendar dates are specified in the Bible prior to the Exodus.

YHWH did not reveal a whole new calendar to Moses. YHWH only told Moses to change which month was to be called the first month. The calendar of Exodus, was one of the three primary calendars of Egypt that Moses would have been taught while in Pharaoh's court. It already existed. YHWH only changed the order of counting the months. Consider Ex.12:41. It states that Israel came out of Egypt "even the selfsame day". This can only be stated as a fact when the calendar of Moses' day also existed 430 years earlier than the Exodus.

<GOTO: Observed Calendar Is The Same As Was Used In 2180 BC below Back 30 >

4. The evidence shows that those who determined the observed calendar held credentials as graduates from elite academies. These academies existed prior to the Babylonian empire, and continued throughout the period of Ezra, on into the Middle Ages. The evidence shows that these academies taught the same calendar rules, and jealously guarded this science as secret[18]. The point is that it does not matter if an academy is located in Babylon, in Palestine, or located in Alexandria. The label: "a Babylonian Academy" does not mean that the academy was pagan, nor does its physical location within the Babylonian / Persian empire effect the science of astronomy or the observed calendar's rules.

5. The book of Daniel reveals several key facts of Babylonian history:

A. The Chaldeans were listed separately from the sorcerers and astrologers. They were separate groups of people. The astronomers were Chaldeans and held the higher social rank.

B. Daniel, by interpreting the dream, had just saved the lives of each of these groups. Socially, they were now "in his service".

C. Daniel was given authority over everyone in the land. Daniel was now in authority over the scribes, the priests, the Chaldeans the sorcerers, and the astrologers. Even if one argues that Jewish-based astronomy academies did not exists in Babylon prior to 580 BC, it remains that they would exist in Babylon after Daniel took over. Daniel was now in a position to ensure that Jerusalem based academies were also established in Babylon. Daniel could now ensure that their graduates became the king's officials, priests, and scribes. Daniel could now ensure that their graduates became the officials, priests, and scribes in all communities throughout the empire. In essence, Daniel was now in charge of the king's court and the calendar of Babylon.

D. The story of Esther, circa 485 BC [Generation #2], (especially 8:2,15; 9:3-4,30; and 10:1-3), describes the Persian empire as consisting of 127 separately governed regions (having 127 separate courts), from India to Ethiopia. Jewish communities were in each of these regions. By the end of the story, Esther and Mordecai became very wealthy landowners having direct access to the king. Further, Mordecai was advanced by the king, and became feared by all the governors of Persia. Anyone in the empire wanting a key appointment or favor would have to seek Mordecai's approval. He became a great leader "seeking the wealth of his people". Over time the Jewish communities would have elite education, credentials, key appointments, legal titles, and land ownership. Remember that all of the enemies of the Jews were now dead No one could object as Mordecai was able to actively advance the prestige of the Jewish communities,

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18. rival academies and groups were the astrologers and free masons. When analyzing historical evidence, keep in mind that many other academies also existed at the same time, but taught their own astronomy for a much different use. For example, mot temples and palaces were built by the masons. They have their own schools with their own graduates.

and further elevate its nobility into key positions throughout the Persian empire.

6. By the time of rebuilding the Second Temple, circa 520 BC, the entire empire was coordinated with a single observed calendar, and this calendar must have been approved by Daniel. Ezra was a descendant of Aaron. He was a bloodline priest. In Ezra 7:6: **"This Ezra went up from Babylon; and he was a ready scribe in the law of Moses, which the Yahweh Elohim of Israel had given: and the king granted him all his request, according to the hand of the Yahweh his Elohim upon him."** Ezra 7:25: **"...set magistrates and judges, which may judge all the people that are beyond the river, all such as know the laws of thy Elohim; and teach ye them that know them not."** To be a scribe means that Ezra was a graduate of a Babylonian academy. Ezra was therefore an astronomer-priest which knew the rules of the observed calendar. Notice that the king granted whatever Ezra asked, and Ezra established magistrates and judges in Jerusalem and in the greater region.

7. Once the Temple was rebuilt, sacrifices, new moons, and Holy Days were observed The focal point of the observed calendar switched back to Ezra in Jerusalem. Ezra and his Temple priest successors became the central authority for the calendar. These Temple priests later became the political/religious force known as the Sadducees.

8. From circa 520 BC, for about 30 generations, until the Temple was destroyed in 70 AD, sacrifices, new moons, and Holy Days were observed using the exact same observed calendar. Letters, whether they be from Babylon, Egypt, or Jerusalem, used the same observed calendar to record the dates of weddings, business transactions, battles, and astronomical events. There are literally over 100,000 clay tablets of this nature just in the British Museum in London alone.

9. From 70 AD until the Middle Ages many Christian and Jewish communities, especially those in Asia Minor, continued to use a form of the observed calendar, and did not use the Hillel II Calendar.

Thus, it does not matter if the graduate is from "a Babylonian Academy". It does not matter if our modem history books call the observed calendar, "the Babylonian Calendar". In the case of the observed calendar, any association with "Babylon" or "Babylonian" does not mean that the calendar is pagan. It just means that the same observed calendar was also used in Babylon too. The same argument is presented for the association with "Egypt" or "Egyptian". It just means that the same observed calendar was also used in Egypt too. <Back38 above >

Are Not The Jews In Moses' Seat ?

Objection: Matthew 23:2, quote: **"The scribes** [Sadducees] **and the Pharisees sit in Moses' seat: All therefore whatsoever they bid you to observe, that observe and do…"** Romans 3:2, quote: **"…unto them [Jews] were committed the oracles of Elohim."** It is not the provenance of Christians to settle Jewish calendar disputes. In my community the Jewish calendar is the Hillel II Calendar. The Jews, not Christians, have the authority to establish the calendar, so that is what we should use.

Answer: Scripture must be viewed in the perspective of other scriptures. The New Testament is full of examples of Christians not submitting to the Jewish authorities. For example, the early Christians were commanded by the Sanhedrin to not use the name of the Messiah anymore. This was a command. Did the first Christians observe whatsoever they were bid by the Sanhedrin ? Acts 5:29, quote: **"Then Paul and the other apostles answered and said, We ought to obey Yahweh rather than men."** Also, note that few Christians today keep the same Day of Pentecost as is listed in the Hillel II Calendar.

The reason why Christians do not observe everything the Jews bid is because there is a huge difference between having the responsibility to guard the truth, versus, the responsibility to command the truth.

For example, the referee of a basketball game is given the responsibility to guard the truth in that he blows the whistle whenever someone breaks one of the riles. But you would get very upset if the basketball referee started to change the rules during the game. Whereas a Congressman is given the responsibility to command the truth in that he creates new laws and changes existing laws as he wills.

The question therefore is: "Do the scribes and Pharisees (the Jews) have the responsibility to guard the oracles of YHWH, or, the responsibility to command the oracles of YHWH ?

If you answer "guard", then you would have to reject the Rabbinical changes made to the original observed calendar. Their duty was to carry out the rules, not to change them.

If you answer "command", then you would have to not only accept the Hillel II Calendar, but all of the other Rabbinical Traditions they have bid you to observe. You would have to accept every other command, edict, duty, dress, and habit that has been passed down throughout history from the rabbis and there writings. This would include the Mishnah and Talmuds. You would also have to keep Pentecost as they bid, and recite the 18 blessings of the Amida, including the "blessing" against Christians and other heretics (it's really a curse on Christians).

The point is that it is unreasonable to take the position that the Jews have the authority to command or change the oracles of YHWH. The oracles of YHWH are YHWH's, not the Jews. Sitting in Moses' seat does not mean they have the authority to change the rules, but rather they have the responsibility to administer the rules. Therefore, if they change the riles we are not obligated to follow. <Back39 above >

Do We Observe The New Crescent Over Jerusalem. Or As It Comes To Us ?

Objection: The observed calendar was simple to implement back then, but it would have major complications today. We are a global society, and no longer just interested in the region immediately around Jerusalem. They lit signal fires to tell the outlining communities it was a new moon. This only worked because the distant communities were less than 15 degrees longitude (1 solar hour) either side of Jerusalem. Today we have a full 180 degree spread either side of Jerusalem to consider, with an International Date Line in the Pacific Ocean. Synchronizing the whole earth to an observed calendar has major administrative decisions. You will not be able to get everyone to agree to follow the same administrative decisions, resulting in complete confusion.

Answer: This is a very important objection to answer. The situation has changed significantly since the Second Temple Era. The synchronization of the whole earth does indeed introduce major administrative questions.

But it is not true that there is no simple administration answer which everyone may agree. There is one simple administration answer which is based entirely on the authority of the official observed calendar's administration during the Second Temple Era. We do not have to guess. We do know how to administer the same observed calendar even in a global context.

A very brief and simplified overview of the administration is as follows. The following is a summary, not a presentation of evidence. For the full discourse read: DateLine.rtf .

First is to understand that we are not interested in keeping the unity of the Gregorian calendar. The observed calendar defines days from a sunset-to-sunset. The modern International Date Line and the twelve midnight day-delimiter are non-existent to the keeping of the Sabbath,

so also to the observed calendar.

Just as with the Sabbath, sunset occurs and the next day begins. So also each observer keeps the new month as it comes to them. If they see the new crescent, they observe the new month.

Individuals and groups will also accept other observer's sightings. Since we have telephones and the Internet, we can assume instant communication of valid sightings. This acceptance is primarily based upon the longitude of the other observer's sighting. Sightings by an observer at a certain longitude are accepted by all others at or after (west of) that observer's longitude. For example, if observers in Denver see the crescent, than everyone west of Denver would accept the sighting too.

Observing the new crescent as it comes visible to your general longitude is the simplest and most natural way of keeping the observed calendar in a global context.

The above is a **very brief answer to a very complex question**.

For the full and technical discourse read: DateLine.rtf . <Back40 above >

The Hail Plague and the First Biblical Month

Herb Solinsky © April 8, 2004

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[1] Introduction to the Plague of Hail

Ex 9:22-34 gives the account of the plague of hail upon Egypt, and this mentions the Hebrew word *abib*, Strong's number 24, in verse 31. The context will help to clarify the meaning of *abib*.

In Ex 9:22 Moses is given the instruction [NRSV] "Stretch out your hand toward heaven so that hail may fall on the whole land of Egypt, on humans and animals and all the plants of the field in the land of Egypt." By examining the Hebrew text for this it will be noted that the Hebrew word *kol*, Strong's number 3605, occurs twice in this verse, first as "whole" (whole land of Egypt) and second as "all" (all the plants). Notice that it does not say "all" pertaining to humans and animals because they may take shelter within man made structures, but plants of the field can not take shelter and "all the plants of the field in the land of Egypt" are mentioned. This verse provides a purpose for the hail, namely that it reach exposed humans and animals and all outdoor plants. Verse 26 gives an exception [NRSV], "Only in the land of Goshen, where the Israelites were, there was no hail."

In Ex 9:24 a further aspect of this miracle is shown [NASB], "So there was hail, and fire flashing continually in the midst of the hail, very severe, such as had not been in all the land of Egypt since it became a nation." Here again the Hebrew word *kol* occurs for "all" (all the land of Egypt since it became a nation). The severity was miraculous, so that one can not discuss its damaging effect in terms of normal sized hail. Another interesting point here is that it describes Egypt as having become a nation some time in the past, and what happened pertains to all of that nation. Verse 25 is especially emphatic because it mentions the Hebrew word *kol* four times [NASB], "And the hail struck all [*kol*] that was in the field through all [*kol*] the land of Egypt, both man and beast; the hail also struck every [*kol*] plant of the field and shattered every [*kol*] tree of the field." What is amazing here is that the Hebrew word for shatter is *shebar*, Strong's number 7665, and it does mean to break. It was such miraculous hail that it broke every tree of the field, certainly not any normal or isolated hail, but especially severe everywhere that trees grew in Egypt.

In the above verses from Ex 9:22, 24-25 the Hebrew word *kol* (= all) occurs seven times for emphasis. While it is true that in Hebrew this word means "almost all" or "all", and does not necessarily mean 100 percent, this does not affect the reasoning to be used from this.

Ex 9:31-32 contains the Hebrew word *abib* in this context [NASB], "Now the flax and

the barley were ruined, for the barley was in the ear and the flax was in bud. But the wheat and the spelt were not ruined, for they [ripen] late." Here the entire phrase "was in the ear" is given for the Hebrew word *abib*. Magil uses square brackets writing "[was in the] ear". To show what is implied about the meaning *abib* from this context it is ,necessary to digress a little about agriculture in Egypt and more specifically about the time of the barley harvest in different parts of Egypt.

[2] Agriculture in Egypt

Except for the northern east-west strip of Egypt that comes close to the Mediterranean Sea, Egypt is a desert with less than two inches of rainfall each year. Barley requires about eight inches of rainfall (if there is no artificial irrigation) during the growing season for a crop to come. The only reason that Egypt produced abundant highly valued crops is that the annual over flooding of the Nile River provided much water that was highly mineralized from the mountains originating far south of Egypt, and the Egyptians had learned how to trap this water and slowly release it to irrigate their farmland along the banks of the Nile River. Once each year the Nile overflowed its banks beginning about the middle of July, and then three months later about the middle of October the water receded so that sowing the grain crops may begin.

In Egypt, the triangular Delta has one side bordering the Mediterranean Sea, and the Nile flows north into the Delta where it splits into a few tributaries that keep the whole Delta productive with crops. The ancient city of Memphis is 110 miles south of the Mediterranean Sea and is at the southern tip of the Delta. Modern Cairo is about 25 miles north of Memphis, within the Delta. Cairo is part of the desert with no more than about 1.5 inches of rain per year. When the Romans began to govern Egypt about 30 BCE, they divided it into three large districts. Page 168 of Talbert is titled "Roman Egypt", and states, "For administrative and fiscal purposes the province [of Egypt] was divided into three large districts - Delta [Lower Egypt in the north], Heptanomia [Middle Egypt], and Thebaid [Upper Egypt in the south]; to the last of these was also joined the frontier zone of the Dodecaschoenus beyond the natural barrier of the First Cataract." The distinction between Upper, Middle, and Lower relates to elevation above sea level; the Nile flows from the high elevation of Upper Egypt in the south to the low sea level elevation of Lower Egypt in the north. A good map of Ancient Egypt is shown on page 167.

Ancient Egypt extends from the Mediterranean Sea to the First Cataract, a straight distance of 500 miles, although the Nile twists and is thus a little longer up to the First Cataract. In rounded numbers the 500 miles is split into the northern 100 miles (Delta), the middle 150 miles (Heptanomia), and the southern 250 miles (Thebaid). The first dam at Aswan, which is at the First Cataract (the southern boundary of Ancient Egypt), was built in 1889. This dam controls the annual floods along the Nile River and thus disrupts the ancient natural timings for some agricultural events. The dam provides energy for a continuous electrical supply and it provides a constant water flow. Artificial fertilization is used today. One must be cautious about using modern harvest data with its timings as if it was fully applicable to the distant past. Nevertheless, events dependent solely on temperature are reasonably applicable to the past.

[3] Smith's Paper and Ears of Barley in Egypt

In 1883, six years before the first dam at Aswan was built, biblical scholar W. Robertson Smith published a paper (see Smith in the bibliography) concerning the time of the barley harvest in Egypt. Our interest is in the winter barley, which is planted in the fall throughout the Nile River basin and grows during the winter. The last paragraph in Smith's paper helps to clarify and reconcile the reports numbered under points 2 and 4 in his paper. He points out that the

source in point 2 means "about ready to harvest" when he writes "is in ear", but the source in point 4 means "the ear has just formed" when he writes "is in ear". Smith's paper is copied as Appendix A below. Writing about southern Egypt, point 2 shows that the barley is ready to harvest from latter February to the middle of March. Point 4 shows that a little north of Cairo the barley is ready to harvest about the beginning of April. At the end of point 2 we find, "The difference between upper and lower Egypt is about 35 days." This is the time from latter February to the first part of April. Point 4 in the paper shows that the barley a little north of Cairo has its ear formed in the beginning of January although it is not ready to harvest until the beginning of April. The colder weather in the north retards the ripening process so that the time for harvest in the extreme north is about 35 days later than in the extreme south.

[4] Lewis's Book and Ears of Barley in Egypt

Page 115 of Lewis states, "The following is the schedule of major activities in an average year in the vicinity of Memphis [southern tip of the Delta] and the Arsinoite nome [about 40 miles further south], with each phase coming two to four weeks earlier in the Thebaid [southern district of Egypt]." This says that from the southern part of Ancient Egypt to the southern tip of the Delta there is a four week (28 day) difference in harvest. Page 116 states "April [Pharmouthi] The grain harvest begins. May [Pachon] Harvesting continues, threshing begins." This is fully consistent with the paper by Smith when allowing for a seven day span from the northern end of the Delta to the southern end of the Delta 110 miles to its south. Page 115 of Lewis states, "October [Phaophi] The Nile flood is past. Sowing of cereal crops begins."

[5] Hartmann's Book and Ears of Barley in Egypt

Hartmann writes about the main exporting region of the Delta on page 122 when he states (translated from the French by James Evans, a friend who enjoyed reading his French Bible during his lunch hours), "The harvest of cereal grains was generally carried out at the end of four months for barley and of five months for wheat (4), which is to say, in the months of April and of May."

[6] Pliny the Elder and Ears of Barley in Egypt

Writing in the first century about the main exporting region of the Delta, Pliny the Elder states on page 229 of Pliny_5, "...in Egypt barley is reaped in the sixth month after sowing and wheat in the seventh,..." Sowing begins about the middle of October and continues into November. The first month after sowing is about November. The sixth month after sowing is about April. Pliny is saying that barley in the Delta is reaped in April and wheat is reaped in May. This is as Hartmann understands it, and it agrees with the earlier sources quoted. Pliny is only estimating the time difference between the harvest of barley and wheat to the nearest month. The specific variety of each plant may cause this difference to vary from no time at all to perhaps over two months. Thus Pliny's rounded estimate is the best one may obtain. From Pliny's statement alone one may only guess that a more accurate value might have been anywhere between three weeks and six weeks.

[7] Conclusions on the Time of the Hail and the Meaning of abib

Based upon Ex 9:22, 24-25 mentioned above, the purpose of the hail throughout Egypt, and the fact that Ex 9:31-32 speaks in a general way for the effect of the hail, not confining the damage to some local region, we now consider the approximate time of this extraordinarily heavy miraculous hail. Point 4 in the paper by Smith (top of page 300) shows that in northern Egypt the ear of barley is formed in the beginning of January and in southern Egypt the barley is ready to harvest in the latter part of February. The most appropriate time for the hail to affect all of the barley in Egypt is about February 20 or sooner, before the barley harvest in the south

begins, but with time for the ear to grow a little in the north. But this range of stages of barley growth from near harvest in the south to over 35 days before harvest in the north is still called *abib* in Ex 9:31. If the hail plague had been in April, then the whole purpose of having the hail go throughout Egypt would have been meaningless because all the barley south of the Delta would already have been harvested by April and hence not ruined. This is evidence from the Bible that the Hebrew word *abib* has a wide range of meaning in stages of growth rather than a narrowly defined meaning such as the finger squeezing pliable "dough" stage.

Based upon Pliny's statement discussed above and its implication that the time difference between the harvest of barley and of wheat must have been somewhere between three weeks and six weeks in any one place, as well as knowing from Ex 9:32 that the wheat was not damaged, we can say a little more. Suppose that the plague of hail occurred on February 20. Since wheat is roughly one month later than barley, would wheat in the far south have been damaged by hail on February 20? The growth of wheat in the far south would be approximately the growth of barley in the far north because there is a five-week spread in the barley harvest. It seems likely that some ears of wheat in the far south might be damaged by this miraculously strong hail on February 20. Hence it is more likely that this occurred closer to the middle of February or perhaps even a little sooner. The conclusion remains that the word *abib* certainly does NOT have to mean ripe or nearly ripe or a hand pliable dough squeezing stage because of the 35 day difference in harvesting from north to south Egypt; this is the main point, not the exact date of the hail plague. The exact date may vary by about a half month because of unusually warm or cool weather over the whole region.

Writing in 1880 Dillman discusses the timing of the hail plague on pages 88-89 based on sources that he mentions (avoiding the difference between northern and southern Egypt), and he estimates that this occurred in January. Without giving any details, on page 244 Hertz writes, "The time indicated is the end of January or the beginning of February." From these two estimates one might surmise that in the mind of these authors the word *abib* could certainly include a very early stage of the development of the ear.

Unfortunately, many biblical Hebrew lexicons such as those by Gesenius and by Brown, Driver, and Briggs are influenced in some of their definitions by the Talmud, the first part of which was published about 200 CE. Biblical scholars today (along with some in the nineteenth century) have come to mistrust meanings given to Hebrew words based on the Talmud. DCH uses all sources of ancient Hebrew texts that were composed before the Talmud in order to arrive at its meanings. On page 103 of DCH the meaning of *abib* is "ear (of cereal)", and one context it cites for the use of *abib* is from "The Temple Scroll" (abbreviated 11 QT) 19:7 where it gives the translation "new bread (made of) ears of various cereals". Here the plural of *abib* is translated ears and implies that the ears were ground into flour in order to make bread. This further shows that the range of the meaning of *abib* extends to being fully ripe so as to be able to make flour. This shows that *abib* includes all stages of the ears, from newly formed to fully ripe. "The Temple Scroll" is found among the Dead Sea Scrolls and most estimates date it to roughly 150 BCE.

[8] Time of the Barley Harvest in Israel

My translation from page 415 of Dalman is, "The harvest that I first observed at Jerusalem on May 8, 1925 was during barley and wheat blossoming, and in the middle of the same month the barley harvest began, in which, on May 24, I used the ripping sickle. On May 19, 1926 the farmers in Jerusalem saw the barley harvest nearly completed, the wheat harvest still remaining. In Jericho the barley harvest is first permitted to begin about the middle or end of

April, for on the 18th of April 1909 I saw it nearly mature there. For the coastal plains April can be predicted as the time of the barley harvest, May as the time of the wheat harvest. At Tiberius on the Sea of Galilee one predicts the beginning of the harvest of broad beans, jointed vetch, and barley from the middle of April onward; wheat harvest first starts in May and continues through July. For...Bethlehem May is the time of the [harvest of] legumes, June is the time of [the harvest of] barley and wheat. In general, for the beginning of the barley harvest in mountainous areas one must wait until the middle of May; the beginning of the wheat harvest is sure to occur about the start of June. On the coastal regions and plains of Jordan the beginning will occur about perhaps 14 days earlier." This shows that the time of the barley harvest varies from about the middle of April in Jericho to June in Bethlehem, which is a span of about seven weeks.

[9] Ambiguity of Month of Abib from its Name

Ex 9:31-32 has shown that the meaning of *abib* encompasses many stages of the caring of barley and that in Israel the barley harvest spans a seven-week period. This is clear evidence that the name of the first month, *abib*, does not in itself define only one month. From the earliest stage of the earing of barley until the harvest is completed in Israel spans a time of perhaps five months. Hence the word *abib* alone is not sufficient to determine when this month occurs. Since the earliest phase of abib occurs long before it is ready to be harvested, if one wishes to propose that "month of Abib" is intended to mean "month of first *abib* " (which the Bible does not say), then this would cause the first month to begin before March.

In I Ki 6:1, 37 there appears the expression "month of Zif", the second month. *zif* is Strong's number 2099. On page 264 of BDB the word zif is given the meaning "brightness of flowers". On pages 265-266 of HALOT3 this word is given the meaning "blossom", which is similar. The primary meaning of the noun "blossom" is "flower of a plant". Is there only one month in which there is brightness of flowers? No. Is there only one month in which there is *abib* (ears of grain)? No. Certainly each year there is only one month named Zif (the second), but this characteristic applies to more than one month. The same is true for *abib.* Some would insist that only the first month that shows this characteristic must have this name. If that were true, then the first month would begin about February or sooner because early stages of ears in Israel are found that soon. But in order for the second month in Israel to be fully characterized by bright flowers, the first month can not coincide with February. This shows that "month of Abib" can not mean "month of first ears". More importantly, what Scripture states that Abib is the month of first ears?

[10] Comparison of Barley Harvest in Egypt and in Israel

When comparing the time of the barley harvest in Egypt with the time of the barley harvest in Israel we see that the harvest in Israel begins at about the time that the harvest in Egypt is finished. In Egypt the barley harvest runs from about the latter part of February to the first part of April (a five week span), while in Israel it runs from about the middle of April to early June (a seven week span). Certainly there are variations in some years due to abnormalities in the temperature; this is a general picture, but it shows a significant difference between Egypt and Israel.

[11] Applying this to Ex 12:2

This has implications for the meaning of Ex 12:2 which was spoken to Moses in the land of Egypt [NASB], "This month shall be the beginning of months for you; it is to be the first month of the year to you." The life of Moses indicates that he was never in Israel and was quite unfamiliar with the time of the barley harvest in Israel. Does it make sense to think that when

Moses heard the words of Ex 12:2 he thought of the barley in Israel? The context of Egypt and the context of Israel are very different for barley. Now consider the time difference from Ex 9:31-32 to Ex 12:2. After the plague of hail there was a plague of locusts and then a plague of darkness. Then came Ex 12:2. From the context nothing prevents a separation of about two months or more. Ex 9:31-32 is simply not in the context of Ex 12:2, and with the difference in the time of barley harvest between Egypt and Israel, Ex 9:31-32 should not be associated with the barley harvest in Israel. There is no reason for Moses to think about the barley harvest at Ex 12:2 because the word *abib* is not even there. One may not arbitrarily grab the word *abib* from Ex 13:4 and shove it into Ex 12:2. If barley in itself was to define the timing of the first month, then it would be of the greatest importance for barley or *abib* to appear in Ex 12:2, but neither is there!

[12] Gen 1:14 is a Cause and Effect Verse

Gen 1:14 "Let there be lights in the vault of the heavens to separate between the day and between the night, and let *them* be for signs and for festivals and for days and years."

Although there is no single chapter that explains the calendar of the Bible in a thorough way, Gen 1:14-18 does provide an outline of the calendar by showing the ingredients that are needed. The biblical viewpoint is that for an observer on the earth the cause is the lights, one effect is the days, another effect is the festivals, and another effect is the years. It would take some specific direct Scripture to overturn these cause and effect outline verses for the determination of all aspects of the calendar. In reality, the light of the sun and its absence each 24 hours as seen from an observer on earth is not the true cause; instead it is the daily rotation of the earth on its axis that makes it seem as if the light from the sun is the cause. But Gen 1:14 speaks of cause and effect in terms of what people can see with their eyes, not the modern physics of the earth's axis. Lights do the separating, and lights are for festivals and years. There are three elements that make up a calendar: the day, the month, and the year. The day is determined through the alternation of light and dark, a visible sign of the sun. The beginning of a month is determined through the reappearance of the moon, the new crescent, which is a visible sign of the moon. The pattern has been established with the outline principle from Gen 1:14 that the day and the month are visible signs of the sun, and now it remains to be seen how this pattern is continued so as to establish the month that is the first.

[13] Minimal and Maximal Viewpoints of the Bible; Josh 5:10-12 and Wave Sheaf

People differ on what they will accept as evidence concerning the biblical calendar. Some will insist that if the Bible itself does not make a clear direct statement concerning an aspect of the calendar or any other subject, then we should not accept any hypothesis about that aspect within the biblical body of beliefs; this is the minimalist position. Others will examine what secular history, archaeology, ancient astronomy, ancient Semitic languages, ancient culture, et cetera indicate concerning an aspect of the calendar or any other subject, and, after comparing this with the Bible, come to conclusions that affect their understanding of the biblical body of beliefs; this is the maximalist position. People will vary between these extremes from issue to issue depending on the nature of the evidence and how convincing it appears to be.

This subject needs clarification concerning the meaning of the Bible, especially as it concerns the minimalist position. In a strict sense, the Bible is the ancient texts of Scripture in their original languages. But that does no one any good unless we can know the meaning of the words and expressions found in these ancient texts of Scripture. Some will disagree and insist that the King James Version alone is the Bible, and will accordingly dismiss Hebrew and Greek lexicons as irrelevant. Such a position must accept the word Easter in Acts 12:4 despite the fact

that the Greek word for this is *pascha*, and everywhere else in the New Testament this word is translated "Passover". There ought to be consistency where it is sensible. Such a position must also accept the words "old corn" in Josh 5:11 and 5:12, a matter that will now be discussed because it concerns the nature of the minimalist position and because it is relevant to matters to be discussed later concerning when to begin the count to the Feast of Weeks.

The Hebrew word translated "old corn" in Josh 5:11, 12 is *avur* (Strong's number 5669). While it is an easy matter to check that all modem scholarly lexicons since the time of Gesenius (early nineteenth century) translate this word as "produce" rather than "old corn", one should understand the reasons, further details, and the implications. It is true that the Hebrew dictionary at the back of Strong's concordance states that this word means "old corn", but this dictionary was made primarily by students who volunteered. They were not scholars, and this should not be classified as a scholarly lexicon.

About 1900 BCE Abraham left Ur of the Chaldeans to go the land of Canaan (Gen 11:31; 15:7). This area which some maps approximate as Haran was about 400 miles northeast of Jerusalem in a region for which Akkadian was the ancient Semitic language. Abraham, Lot, and their servants with their families brought this language with them, but Isaac, Jacob, and his sons' families lived in Canaan where their language was influenced by the Canaanites. Roughly 500 years after Abraham's time Joshua led the Israelites back into the land of Canaan where the Ugaritic language was spoken. The people of Israel never destroyed all the peoples of Canaan, and ancient Hebrew became a modified blend of Ugaritic with some variation of words from Akkadian. Ancient Hebrew was also similar to Phoenician, the language spoken just north of Canaan. The language of Phoenician colonies is the Punic language, which is very similar to Hebrew. Later, Aramaic became the language of the Mesopotamian region, but Aramaic was originally an eastern Mesopotamian Semitic language that also has many affinities to Hebrew. Syriac is a later offshoot of Aramaic. The common ancient Semitic languages that are closest to biblical Hebrew in order of closeness are Ugaritic, Phoenician, Punic, Akkadian, Aramaic, and Syriac. Arabic is another Semitic language that is less close to biblical Hebrew.

Page 128 of Ellenbogen points out that the translation "old corn" was an interpretive explanation by the Jewish sage David Kimchi (1160-1235), and his influence (by later reputation) among the Jewish scholars responsible for the Hebrew portion of the King James Version led to its adoption of "old corn". Ellenbogen writes that the Akkadian word *eburu* means produce and harvest (from its ancient contexts that have survived the ravages of time). Often there is little distinction between the Semitic consonants "B" and "V", and only the deletion of one dot changes the Hebrew letter bet ("B") into vet ("V"), so that the Akkadian *eburu* is essentially *evuru,* which is almost the Hebrew avur ("old corn" in the KJV). Ellenbogen also mentions similar words in Aramaic and Syriac with this meaning. This word is discussed on pages 39-40, 65-66 of Cohen_1978 where further references are given for the Semitic background of this word. Page 65 states, "Note finally that *avur* seems to be attested now on an ostracon from Arad with the meaning 'harvest-produce.'"

Near the end of Josh 5:12 the Hebrew word *tvuah* (Strong's number 8393) is translated "yield" which the Israelites ate later that year which would then have become stored grain. *tvuah* refers to food in storage in Lev 25:22; II Chr 32:28, although in other contexts its age is not relevant to its use, so that the meaning of *tvuah* includes both fresh produce and stored produce. Nevertheless, the contrast of *tvuah* with *avur* in the same context would further indicate that *avur* means fresh produce rather than old grain. A large quantity of old grain would more likely have been stored within the protected walls of Jericho rather than in the smaller less pro-

tected area of Gilgal (Josh 5:10), so the context further supports the view that *avur* means fresh produce rather than old grain. This is indirect contextual supporting evidence.

According to Lev 23:14 Israel was forbidden to eat of the new crop until the day of the wave sheaf offering. Num 31:25-27; Deut 20:14; Josh 22:8 shows that the spoil of the enemy was to become theirs even though they did not plant it. Hence the new produce was theirs. Thus the wave sheaf offering must have been performed by the date of Josh 5:11 in order for the Israelites to have been permitted to eat that produce. Josh 5:11 states "on the morrow following the Passover", and this phrase in the Hebrew also occurs in Num 33:3 where it is stated to be the 15th day of the first month. Thus the date of Josh 5:11 was Abib 15, and the wave sheaf offering must have been offered on (or before) that date. But it couldn't have occurred before Abib 15 because Lev 23:5 mentions the Passover on the 14th day before discussing the days of unleavened bread and the wave sheaf offering. Thus the wave sheaf offering occurred on Abib 15 that year, which, according to Lev 23:6 and Num 28:17 was the first day of unleavened bread. Since the wave sheaf offering is mentioned after the seven days of unleavened bread, the "morrow following the Sabbath" in Lev 23:15 must always be one of the seven days of unleavened bread.

The day of the wave sheaf offering is mentioned in Lev 23:15-16, which literally states, "And you shall count for yourself on the morrow following the Sabbath from [the] day you brought the sheaf of waving [to the priest], seven complete (or perfect) Sabbaths they shall be, until on the morrow following the Sabbath the seventh, you shall count 50 day[s], and you shall present a new offering to YHWH." Here the Hebrew phrase *memacharat*, meaning "on the morrow following", occurs twice. This shows the ending of the count to 50 on a Sunday (morrow following the Sabbath) and the starting of the count also on a Sunday. Thus Josh 5:11 fell on a Sunday, the fast day of unleavened bread.

In summary, the rejection of the translation "old grain" for AVUR in Josh 5:11, 12 comes from (1) the evidence of a very similar word in Akkadian, Aramaic, and Syriac which are Semitic languages; (2) the meaning of "old grain" is not known prior to Kimchi about 1200 CE; and (3) the indirect implications of the context. Modern scholarly lexicons base their conclusion primarily on (1). The minimalist position on the Bible would be in a dilemma here because the contexts of the similar word in the other Semitic languages are not in the Bible and the secular history of the interpretation of *avur* is also not part of the Bible. The indirect implications of the context are too weak by themselves to determine the meaning of this word (assuming the other evidence is totally rejected). In light of this example we consider again the meaning of the Bible. If the Bible is only the ancient texts of Scripture in their original languages, then what determines the meaning of its words and phrases? Does a person blindly accept the modem lexicons without looking into the reasons for what the lexicons say? These lexicons are certainly not part of the Bible. In order for the minimalist viewpoint to arrive at rational meanings from the original languages, it would seem that some of the ideals of the minimalist position would have to be abandoned. This is mentally unsettling to some minimalists because of a psychological desire to want to possess all data upon which to arrive at biblical knowledge, and this is contradictory to the need for someone to go to specialized libraries and research journal articles and commentaries that discuss words in ancient Semitic languages which have a bearing on the meaning of some biblical Hebrew words.

If one wishes to glean insight into the ancient Hebrew of the Bible, one must move toward the maximalist position and recognize that there are many instances in which the Bible does not explain itself nor does it indicate the meaning of certain words. One must especially

look at words in ancient Semitic languages that are similar to ancient Hebrew words and used in similar contexts, and then accept those meanings that are implied by the non-biblical ancient contexts. This is not extending the Bible or indicating that ancient non-biblical texts should be thought of in a manner that gives them any sense of inspiration from the Holy Spirit, but instead shows historical ancient usage, though often in contexts with pagan rites and thoughts. Context shows meaning regardless of its nature. Ancient usage helps clarify the meanings of some Hebrew words. The KJV was published in 1611. Gesenius wrote his famous Hebrew lexicon before the middle of the 19th century and often used the meanings of ancient Arabic and Syriac words to explain the Hebrew words. But after his death newer archaeological discoveries written in ancient Akkadian, Ugaritic, Phoenician, and Punic have been made that are closer to Hebrew than Arabic and Syriac, and thus many useful papers and commentaries have been written since the middle of the 20th century, and some useful newer lexicons are available.

[14] Biblical View of the Sun's Yearly Motion is South - North

Ecclesiastes mentions the sun (*shemesh* in Hebrew) more than any other book of the Bible -35 times! One pair of verses gets specific about its motion, but this is only noticed if care is taken to preserve the Hebrew word order and if courage is exercised to allow the Hebrew to make sense! A literal translation of Eccl 1:5-6 with special attention to keeping the word order the same as it is in the Hebrew text is:

Eccl 1:5 "And rises the sun and goes [away] the sun and to its place it pants, rising it there [again].

Eccl 1:6A It [the sun] goes toward south and turns around toward north.

Eccl 1:6B Turns around [and] turns around goes the wind, and on its circuits returns the wind."

Page 55 of Zlotowitz translates Eccl 1:5-6, "And the sun rises and the sun sets-then to its place it rushes; there is rises again. It goes toward the south and veers toward the north; the wind goes round and round, and on its rounds the wind returns." On the next page appears the comment, "Midrash Leckach Tov [by Toviah ben Eliezer, 11th century] interprets this verse [verse 6A] as referring to the course of the sun as manifested by the winter and summer seasons, but it adds that on a deeper level the verses [5-6] refer to the Jews [they have moved from place to place due to persecution]."

About the year 400 CE Jerome translated the Tanak from Hebrew to Latin, which, except for the Psalms, became the Latin Vulgate. Page 307 of Japhet gives the following careful translation from Jerome's Vulgate for Eccl 1:5-6, (additions in square brackets are made by Japhet), "The sun rises and [the sun] sets and returns to its place. It rises there, goes to the south and turns about to the north. As it circles the world around goes the spirit, and upon its circuit returns [the spirit]." Jerome made this rhyme in the Latin.

In general I never use the Septuagint translation (abbreviated LXX) as a means of understanding some seldom used Hebrew words or difficult passages of the Tanak because it often shows mere guesses for the Greek translation, so it is not reliable as an ancient indicator of the meaning of the Hebrew Bible. Among all of the books of the LXX, Ecclesiastes stands apart in a special way. Page 7 of Seow reveals, "The translation technique of LXX Ecclesiastes is unique among the books in the Bible, so that one may say with a reasonable amount of certainty that the translator is not the same as for any other books. The translation shows a number of features that are typical of the works of Aquila of Pontus, a second-century (CE) gentile convert to Judaism. Aquila, a pupil of the famous Rabbi Aqiba is best known for his translation of the Hebrew Bible into literalistic Greek [about 135 CE], among other reasons, to provide Jews who

spoke Greek but did not read Hebrew or Aramaic with a translation that would reflect the Hebrew as much as possible. Thus, the Hebrew word order is rigidly adhered to and all details in Hebrew are represented, even when they seem awkward or even nonsensical in Greek." While scholars debate whether Aquila was the translator, we do know that the LXX for Ecclesiastes is literal and sticks very closely to the Hebrew. The commonly available translation of the LXX by Brenton translates Eccl 1:5-6, "And the sun arises, and the sun goes down and draws toward its place; arising there it proceeds southward, and goes round toward the north. The wind goes round and round, and the wind returns to its circuits." This translation reflects the fact that the word for "wind" does not occur in the Greek until after the word for "north". In fact, the Greek word order after "north" is "round round courses the wind", so Brenton's translation does put "wind" earlier in the verse than the Greek indicates. The Greek word *pneuma*, Strong's number 4151, is used for wind, which is the translation of the Hebrew word *ruach*, Strong's number 7307. Page 300 of Japhet translates the LXX more literally, "And the sun rises and the sun sets and draws to its place. It rises there, goes to the south and turns about to the north. Turns about, turning goes the *ruach (pneuma*), and upon its circuit returns the *ruach (pneuma*)." In footnote 31 on page 301 Japhet remarks, "This faithfulness to the MT [Massoretic Text of the Hebrew] is particularly striking when it creates forms which are awkward in the Greek."

Pages 298-299 of Japhet point out that Rashi, the well known Jewish commentator of the late middle ages, also treats the sun as the subject into Eccl 1:6.

The Syriac language is an offshoot of first century Aramaic and is thus a Semitic language that has affinities to Hebrew. The Syriac Peshitta is a translation from the Hebrew Bible that was made about 200 CE. The Peshitta in its literal word order, is in agreement with the Hebrew text of Eccl 1:5-6 in continuing with the sun as the subject of Eccl 1:6A; however, George M. Lamsa's translation from the Syriac Peshitta departs from the literal view and translates it as if the wind were the subject at the beginning of verse 6. Lamsa often departs from the Syriac to agree with the KJV.

Page xi of Sternberg translates Eccl 1:5-6A, "The sun rises and the sun sets and hastens to its place and rises there. It walks to the south and returns to the north."

In Sternberg's above translation the word "walks" comes from the Hebrew word *halach,* Strong's number 1980, which is typically used in reference to people walking, yet it is used in other ways for the movement of inanimate objects. However, from the viewpoint of an observer on earth, the position of the sun at sunset from day to day does change in distinct increments as a "walk", and the position of the shadow cast by a narrow object at noontime from day to day also changes in distinct increments as a "walk". These changes do form a south-north yearly cycle as will now be explained.

[15] The South - North Yearly Cycle Indicated in Eccl 1:6A

A person who views sunsets daily from a place at which there is a clear view of the horizon might notice that the sun does not set at the same part of the horizon each day. He might think of performing the following experiment to determine the daily change in the position of the sun at sunset.

Permanently place a straight board and an object with a sighting point so that the middle of the board is about the length of a person west of the sighting point, and when looking approximately west with one's eye at the sighting point, the long top edge of the board is even with the horizon. Each day near sunset make a mark on the board where the board crosses the line of sight from the sighting point to the middle of the sun. For accuracy this should be done when the center of the sun is at the horizon.

If this is done from anywhere in the north temperate zone, for example Jerusalem (latitude 31.8 degrees north), during the coldest part of the year, the daily marks on the board keep going north (to the right). During the hottest part of the year the daily marks on the board keep going south. For several days while the temperature is getting quite hot, the marks will be at about the spot that is the furthest north of the marks; the middle day of this group is the day of the summer solstice. For several days while the temperature is getting quite cold, the marks will be at about the spot that is the furthest south of the marks; the middle day of this group is the day of the winter solstice. The word "solstice" means "stopping of the sun" which describes the state of the marks at the solstices. At all other times of the year the marks are separated from one another while heading north, or separated from one another while heading south.

The marks on the board are furthest from one another at the midpoint between the solstice marks because the south-north motion of the sun is fastest at these points. The mark closest to the midpoint while the marks are heading north is the mark at the vernal equinox. The mark closest to the midpoint while the marks are heading south is the mark at the autumnal equinox. Although this method determines the equinoxes quite precisely by first knowing the solstices, it is not necessary to know the day of the solstices precisely because the marks barely change for several days about a solstice. Page xii of Sternberg is one of several sources that discusses this.

[16] Equinox and Solstice is in the Bible

The Hebrew word *tkufah*, Strong's number 8622, occurs four times in the Bible, Ex 34:22; I Sam 1:20; II Chr 24:23; Ps 19:7. In 1907 when the well known lexicon by Brown, Driver, and Briggs, abbreviated BDB, was published (see page 880 for *tkufah*), the Dead Sea Scrolls were not yet discovered and clarifying insightful meanings into some ancient Hebrew words were not yet available. The Dead Sea Scrolls use the Hebrew word *tkufah* in contexts before the first century, and this is now discussed.

The paper by Hoenig discusses a scroll labeled I QH among the Dead Sea Scrolls. On pages 312-313 he explains two expressions found there: one is "*tkufah* of the day" and the other is "at the appointed time of the night at *tkufah*". Hoenig explains that the former means "zenith of the day" meaning "noon" and the latter means "at the appointed time of the night at zenith" meaning "midnight". It is particularly interesting that in the expression "at the appointed time of the night at *tkufah*" the Hebrew word for "appointed time" is *moed*, the same word used for the holy days in Lev 23 and for seasons in Gen 1:14. Thus it is not foreign to ancient Hebrew to use or associate *tkufah* with *moed.* This use of *tkufah* shows two heavenly bodies, the earth and sun, interacting on a daily basis so that at astronomically distinctive points in time *tkufah* refers to those points in time.

In the book chapter by Johann Maier one of the Dead Sea Scrolls is discussed that contains the Hebrew word *tkufah*. On page 146 Maier writes, "The Songs themselves are attached to the thirteen Sabbaths of one quarter or season *(tkufah*) of a year, according to the editor the first quarter (the Nisan season) only." Here we see the Hebrew word *tkufah* used for the season of spring which begins with the vernal equinox and ends with the summer solstice. Here also astronomically distinctive points in time involving the earth and sun define a time period called *tkufah.*

The intertestamental apocryphal Book of Sirach (also known as Ecclesiaticus) contains the Hebrew word *tkufah*. This book was written in Hebrew about 190 BCE, but today only incomplete sections of it have survived, having been discovered with thousands of other Hebrew texts in the attic of a synagogue in Cairo, Egypt toward the end of the nineteenth century. The

treasure of texts in that attic which survived for many hundreds of years is known as the Cairo Geniza. There are many copies of Sirach in Greek translation, and most of the Hebrew words in Sirach 43:7 are preserved, one of them being *tkufah.* The Greek translation for *tkufah* is *suntelia* (Strong's Greek number 4930), which means completion, fulfillment, or destruction. These words indicate a point in time at which some event occurred. In harmony with this idea, the Jerusalem Bible translates Sirach 43:7, "the moon it is that signals the feasts, a luminary that wanes after her full". Here "her full" refers to the full moon and is translated from *tkufah* or *suntelia*. Here *tkufah* refers to a natural distinctive time of the moon in its movement about the earth.

These contexts from the Dead Sea Scrolls and from Sirach from before 70 CE show that the Hebrew word *tkufah* is used to refer to natural distinctive points or time intervals associated with the heavenly bodies of the earth, sun, and moon.

On page 394 of the lexicon by Holladay the word *tkufah* is defined. The parentheses and square brackets are part of the text of that book by Holladay where he writes about *tkufah* "turning (of sun at solstice) Ps 19:7; (of the year, i.e. end of year, at autumnal equinox) Ex 34:22; (of the days [i.e. of the year] = end of year I Sam 1:20".

In Ex 34:22 Moses was told, in literal translation, "And you shall celebrate...the Feast of Ingathering *tkufah* the year". There is no Hebrew preposition attached to *tkufah* here so that the relationship between this feast and tkufah is very indefinite although translations attempt to make it definite by adding some preposition that is not in the Hebrew. This verse does not define an explicit relationship between these events, but merely indicates that there is some vague closeness in terms of the general year. In harmony with the astronomical uses shown above, this refers to the autumnal equinox. Certainly Moses was aware of the equinoxes from the knowledge he gained in his upbringing in Egypt (Acts 7:22), and the fact that the greatest pyramids had one wall aligned exactly east-west. Only on the days of the equinoxes does the shadow of a vertical object fall exactly east-west all day long. The ancients were easily able to determine an east-west line. Therefore the equinoxes are visible signs of the sun in relation to the earth and do fall within the purview of signs in Gen 1:14 "lights in the expanse of the heavens...for signs and for festivals and for days and years".

The main points are:

(1) The Hebrew word *tkufah* found in Scripture does have use outside the Bible before Herod's Temple in Jerusalem was destroyed in 70 CE.

(2) Contexts with *tkufah* show it to mean distinctive points in time in relation to movements of the heavenly bodies as observed from people on earth. Also, it is used for the time period between the distinctive points, e.g., the Nisan *tkufah* or spring season.

(3) Moses used this word. While he did not specifically use it to refer to the vernal equinox, Ex 34:22 refers to the autumnal equinox, at least showing that Moses had a word in Hebrew that refers to an equinox.

Does Ex 34:22 refer to the end of the harvest when it uses the word *tkufah*? There is no ancient context that forces *tkufah* to mean a "point" of time defined by a harvest in contrast to ancient contexts that show it to relate to heavenly bodies. This is simply a matter of finding contexts that bring out meaning that is clear. Incidentally, the three main crops harvested at that general time of the year are figs, olives, and grapes. Figs, are a summer fruit, hardly ever extending into fall. The olive harvest occurs in September and October, and is over in most parts of Israel by about the third quarter of October. The grape harvest begins with sour grapes in July but with ripe grapes in some areas of Israel from the beginning of August. The grape har-

vest continues through about the first third of November in the area of Jerusalem. The uses of *tkufah* in the Dead Sea Scrolls show the meaning of a point in time.

[17] Equal Daytime and Nighttime is Not the Biblical Equinox

The word "equinox" comes from the Latin language and means "equal night" in that language, which implies that daytime and nighttime are equal at the time of an equinox. But did the ancient people that used this Latin name equinox use the meaning of this word in practice, or was it a mere guess that daytime and nighttime are equal on the days of the equinox? It will be shown that this was a mere guess.

Near the dates of the equinoxes the difference in time from sunrise to sunset from one day to the next is about two minutes. In order to determine the date upon which daytime and nighttime are equal at a certain latitude, it is required that a clock exist that can measure time during a 12 hour period to an accuracy that is better than two minutes per day. When ancient Babylonian astronomers recorded an eclipse or the disappearance of a planet behind the moon, they wrote down the time it occurred as well as the month, day of the month, and year of a king's reign. The paper of Stephenson explains that the smallest Babylonian unit of time was called an *us* and equaled 1/360 of a day, which is four minutes. Moreover, the Babylonians never expressed time as a fraction of an *us*. This shows that they made no attempt to express time more accurately than to the nearest four minutes with their water clocks. The paper of Steele showed a summary of a computer study of Babylonian astronomical phenomena from 562 BCE to 41 BCE, all recorded with a time of day. The conclusion was that the average accuracy of the recorded time was two *us's* which represents eight minutes from the true time. Moreover, accuracy remained the same during this 500 year period; their water clocks used for this purpose did not improve. One reason that water clocks were not accurate is that as temperature changed, the dripping rate changed. Another reason is that the construction of the mechanism and the recording method were not accurate. Page 609 of Ward shows a graph of how the accuracy of time mechanisms improved through history, based on historical improvements. This chart shows a sudden leap to about two minutes per day in the year 1656 when Christiaan Huygens perfected the pendulum clock. Ancient peoples did not have the ability to determine the day at which daytime and nighttime were equal because their clocks were not accurate enough. The day upon which daytime and nighttime are equal depends on the latitude of the observation because refraction of light increases as one gets closer to the north and south poles.

As already explained from Eccl 1:5-6, the Bible indicates that the sun's annual position was noted on the basis of its south-north movement which was not a matter of measuring the time of day.

The Hebrew noun *tkufah* has an inner stem in common with the Hebrew verb *nahkahf* which occurs 19 times in the Hebrew Bible. The latter means "to surround" 11 times - I Ki 7:24; II Ki 6:14; 11:8; II Chr 4:3; 23:7; Job 19:6; Ps 17:9; 22:16; 88:17; Isa 15:8; Lam 3:5. It means "to go around" four times - Josh 6:3, 11; Ps 48:12; Isa 29:1 ("add year to year, let feasts 'go around "'). It means "to destroy" twice - Job 19:26; Isa 10:34. It means "to curve" once - Lev 19:27. It means "to finish" once - Job 1:5. The overall flavor of this word indicates the idea of encirclement, which does not have any implication about accurate clock time measurement. The relationship between *tkufah* and *nahkahf* indicates that encirclement of heavenly bodies provides the basis of the meaning rather than the Latin meaning of equinox (equal night with day). When the word equinox is used, its original Latin meaning is discarded, and instead, the time of its practical determination anciently is meant. This time agrees with the modern astronomer's time for the equinox although the modem astronomer uses a technical definition that ancient

peoples could not have used.

Page 124 of Pannekoek states, "Another instrument they [the Greek astronomers living in Egypt after the time of Alexander the Great] used was an equatorial ring, placed before the temples in Alexandria, in Rhodes, and perhaps in other towns, for calendar purposes. It consisted of a cylindrical belt, with its upper and lower borders exactly in the direction of the equatorial plane; the shadow of the southern half upon the inner side of the northern half left a narrow line of light at the upper or at the lower side of the equator. Thus the exact moment of the equinoxes could be fixed." This modern description of this ancient instrument uses the term "equatorial plane" which the ancient Greeks did not use; they bisected shadow angles at the solstices in order to construct this instrument, which is today called the equatorial ring. Pages 73-74 of Pannekoek state, "The Babylonians, according to Greek testimony, used a vertical pole for measuring shadow length; thus they could determine the moments of solstice and, as medium points between the solstices, the moments of vernal and autumnal equinoxes."

The paper by Neugebauer proposes a simple geometric method by which the Great Pyramid could have been constructed so that it could have achieved its great accuracy in cardinal directions (precise east-west and north-south). Only on the days of the true equinoxes (not when daytime and nighttime are equal) does the shadow of a vertical object fall exactly east-west all of the daytime. This will be discussed further in the next section.

Pliny the Elder, writing about the middle of the first century, defines the equinox in two ways that are somewhat contradictory on page 309 of Pliny_1. He writes that "at the season of the equinox sunrise and sunset are seen on the same line", and this is the east-west line; this definition is practical and accurate, and while stated in a way that is very different from a modem astronomy book, it is nevertheless the same in the time. Pliny also writes "the equal hours of day and night at the equinox". When rounding off to hours this is correct, but not when rounding off to minutes in the latitude of the Mediterranean Sea where Pliny lived.

On page 81 of Pasachoff we find, "These points are called equinoxes because the daytime and the nighttime are supposedly equal 12-hour lengths on these days. Actually, because the refraction by the earth's atmosphere makes the sun appear to rise ahead of the middle of the sun, at U.S. latitudes the daytime exceeds the nighttime by about 10 minutes on the days of the equinoxes. The days of equal daytime and nighttime precede the vernal equinox and follow the autumnal equinox by a few days." This is four or five days for the U.S.

[18] The Vernal Equinox and Ex 12:2

Gen 1:14 mentions the lights in the heavens, and these are the sun, the moon, the stars, the planets, and comets. The cycles of the planets and comets are much too irregular in comparison to repeatable phenomena on the earth to consider in relation to a biblical calendar when considering the lights in the heavens. The stars must be excluded because during every 1000 tropical years the time of the appearance of the stars slowly shifts about 14.1 days further into the tropical year thus losing touch with the earth's seasons; this is called precession of the equinoxes in books on astronomy. Only the sun and moon remain to be considered. The moon determines the months but not which month is the first. Only the sun remains to be considered. The only repeatable time points involving the sun are the two equinoxes and the two solstices. Considering that the barley and wheat in Israel are harvested in the spring, the vernal equinox is the only logical candidate to consider that involves the lights in the heavens on the direct basis on Gen 1:14.

We must seek to know what Moses knew. Acts 7:22 reads [NKJV], "And Moses was learned in all the wisdom of the Egyptians, and was mighty in words and deeds." Pages 333,

336-337 of Lockyer show that most of the Egyptian pyramids are oriented east-west, and the two largest pyramids at Gizeh built by Cheops and Chephren are oriented east-west, having one wall aligned exactly east-west. Pages 63-64 of Lockyer explain that the sun's shadow on a vertical object from sunrise to sunset fall exactly east-west only on the days of the equinoxes. So it is clear that Moses knew how to determine the days of the equinoxes. When one considers that Gen 1:14 points to the lights in the heavens to determine the festivals and knowing that only the vernal equinox is related to the time of the year under consideration, Moses would naturally think of the vernal equinox in relation to Ex 12:2. That would be Egyptian training, Egyptian thinking, Egyptian context, and in harmony with Gen 1:14, the only explicit Scripture that directly addresses the determination of the festivals. Would Moses think of the vernal equinox if it had not yet occurred by that day? No, it would be premature for him to think of it. The natural thinking from Ex 12:2 in the context of Egypt and what Moses knew would point to the vernal equinox as having occurred.

Would Moses think it was necessary for him to explicitly mention the vernal equinox in the context of Gen 1:14? If this is the only choice there was, he need not think it was necessary. But the real biblical evidence comes next.

[19] Ezra and Nehemiah in Relation to the Equinox

Ezra 6:15 mentions the month Adar and Neh 6:15 mentions the month Elul. These are month names in the Babylonian calendar, but these verses are in the context of Jerusalem. From 499 BCE to 400 BCE the Babylonian calendar followed a 19 year pattern which began Nisan on or after the vernal equinox, with one exception by one day in 465 BCE (only that one year during this century did the first month of the Babylonian calendar begin one day before the vernal equinox, but not adhering to this would have upset the 19 year pattern, which the Babylonians were apparently not willing to do). History reveals that Ezra traveled from Babylon to settle in Jerusalem in 458 BCE, and Nehemiah followed in 444 BCE. They were apparently willing to replace the use of the name Abib with the name Nisan in the context of Jerusalem because they accepted the Babylonian month names. Neh 8:2, 9 show that Ezra kept the holy day of the first day of the seventh month at the correct time. From this time onward Israel used the Babylonian month names for their calendar, which would have led to confusion unless the Israelite calendar and the Babylonian calendar began Nisan at the same time almost always during the century in which Ezra and Nehemiah lived.

The claim has been made that the Persian Empire forced the Jewish leadership in Israel to accept the Babylonian month names into their religious calendar and discontinue all of the original month names. Ezra 7 gives the text of a letter from the Persian King Artaxerxes to Ezra the priest, and in verse 16 the king writes that the religious laws are in the hand (power) of Ezra, showing that the king is respecting the independence of the priest in carrying out the laws of the Bible. Neh 5:14 shows that Nehemiah was appointed governor by the king, and in Neh 13:30 Nehemiah writes, "Thus I cleansed them [the Israelites] of everything pagan." Israel had religious autonomy and self-determination. If the Babylonian Nisan was oftentimes not the Jewish first month, then the Jews would have kept both sets of names to avoid confusion with their numbering of religious months. Or instead, the Jews could have merely used numbers of the months without names for the religious calendar. Another response to this is that the Persian Empire had no control over Scripture, and through inspiration of the Holy Spirit, Ezra 6:15 and Neh 6:15 could have used the month number rather than the month name in the context of Jerusalem. These verses give approval to the use of Babylonian month names and provide a calendrical witness to us.

The book of I Maccabees covers the history of Israel from about 175 BCE to 130 BCE and was originally written in Hebrew. It shows the military struggle of the Jews to gain independence from Seleucid domination. The Jews had some degree of success, but it was a continual struggle. In this context of greater Jerusalem the Jews use Babylonian month names for their calendar in I Macc 4:52, 59; 7:43, 49; 14:27; 16:14 when the Babylonian Empire and the subsequent Persian Empire no longer existed. Josephus also uses these month names and calls them Jewish, and these names have been kept by the Jews until today. The existing biblical and historical evidence is that the Babylonian month names were not merely a secondary secular alternate method to designate dates apart from the biblical month numbers (as we today use January to December apart from the biblical month numbers), but that the Babylonian month names and the biblical month numbers were synonymous in designating months. For example, I Macc 4:52 reads, "Early in the morning on the 25th day of the ninth month, which is the month of Chislev,.." This does not say that in this particular year the ninth month happened to be Chislev, but that the ninth month is Chislev. To emphasize this point even more vigorously, verse 59 states, "Then Judas and his brothers and all the assembly of Israel determined that every year at that season the days of dedication of the alter should be observed with joy and gladness for eight days, beginning with the 25th day of the month of Chislev". Thus this festival of Hanukkah (Feast of Dedication in John 10:22) was always to begin on Chislev 25, thus requiring Chislev to always be the ninth month.

The book of Esther discusses the origin of the Feast of Purim, which has been kept by Jews from that time in 473 BCE in Babylon until today. For the year 473 BCE see the note to Est 8:12 in NIV. The date of the writing of the book of Esther is less certain. On page 718 of NIV we find, "Several scholars have dated the book in the Hellenistic period; the absence of Greek words and the style of the author's Hebrew dialect, however, suggest that the book must have been written before the Persian Empire fell to Greece [Alexander the Great] in 331". In Est 9:19-23 it is clear that the Jews had decided that every year on the 14th and 15th days of the 12th month Adar they would celebrate Purim. Note the specific wording in Est 9:20-21, "And Mordecai wrote these things and sent letters to all the Jews, near and far, who were in all the provinces of king Ahasuerus, to establish among them that they should celebrate yearly the 14th and 15th days of the month of Adar," and verse 23 concludes, "So the Jews accepted the custom which they had begun, as Mordecai had written to them".

Thus Scripture teaches that the Jews accepted that the month named Adar would always be the month in which the Feast of Purim would fall. Adar is the name of the 12th month in the Jewish calendar as well as in the Babylonian calendar. The month names and month numbers were locked together; they did not slide around with respect to one another.

A number of letters written in Aramaic have been discovered during the late 19th and early 20th centuries on the island of Elephantine in Egypt which is on the Nile River about 500 miles south of the Mediterranean Sea. This island was a military base of the Persian Empire when it controlled Egypt. The troops at this military base were Jewish mercenaries. One of these letters is known in scholarly circles today as the Passover Papyrus. The Hebrew-Aramaic alphabetic characters in this letter along with an English translation are found on pages 56-57 of Lindenberger. In the following quotations from the letter, the square brackets and the contents within them appear on page 57 of Lindenberger. The letter contains "This year, year five of King Darius" which dates the letter in 419/418 BCE. There are gaps in the letter because it is poorly preserved. The addressing of the letter says "[To] my brothers Yedanyah and his colleagues, the Jewish garrison, from your brother Hananyah". It was written from one Jew in

friendship to the Jews on the island with whom the author had familiarity. Part of the preserved text of the letter says, "Be scrupulously pure. Do not [do] any work [...]. Do not drink any [...] nor [eat] anything leavened [...at] sunset until the twenty-first day of Nisan [...]". Another translation of this same segment of this letter is on page 283 of Whitters where he adds in square brackets some guesses in gaps in the text as follows, "be pure and take heed. [Do no] work [on the 15th and the 21st day, nor] drink [fermented drink, nor eat] anything [in] which [there] is leaven [from the 14th at] sundown until the 21st of Nis". Note that the final letter of Nisan is missing in the poorly preserved papyrus so only "Nis" is shown. This provides historical evidence that after the return from exile under Ezra and Nehemiah, Jews named the first month Nisan as a substitute for Abib. On page 283 Whitters comments, "The letter came from one Hananiah, who apparently wanted the Jews in Egypt to celebrate Passover and Unleavened Bread appropriately. The address and greeting rule out a local Egyptian official or Persian overlord." If the name Nisan was not significant for the first month, the letter could simply have said the first month or Abib.

[20] Gen 1:14; Ezra 6:15; Neh 6:15 Show the Vernal Equinox Starts the Year

Ezra 6:15 and Neh 6:15 tie in with Gen 1:14 to give the biblical and archaeological evidence that together show explicit evidence that Gen 1:14 involves the vernal equinox. The Babylonian cuneiform inscriptions are archaeological clay records that are now mostly in the British Museum. These tablets have eclipse data as well as new moon sighting data that correlate with computerized astronomy to prove the dating of their calendar. From the knowledge of the Babylonian calendar with the use of these month names in Israel we can say that Nisan 1 is on or after the vernal equinox. In discussions above it was pointed out that by the process of logical elimination of choices about the time of Ex 12:2 and within the parameters of Gen 1:14 involving the lights in the heavens, the vernal equinox is the only candidate for starting the year.

Some people have proposed that merely the 16th day of the fast month need be on or after the equinox, and not the first day of the first month. Aside from the fact that this is not a natural thing for Moses to imagine, there is the practical problem of having to predict at the beginning of the month whether the 16th day of the month will be on or after the equinox. From one equinox to the next is 365 or 366 days, and it is not an easy matter to predict between the two because there is no repetitive pattern. However, it is only in unusual cases when the first day of the month will be within a day of the vernal equinox.

If it had originally been true that merely the 16th day of the first month need be on or after the equinox to determine the first month, then about half the time the Israelite first month named Nisan would have been one month earlier than the Babylonian Nisan, and consider what confusion there would be in that case. The confusion would be unacceptable.

[21] Difficulty of Distance from Israel and Deut 30:11-14

Deut 30:11 "For this commandment which I command you today is not too difficult for you, nor is it far off.

Deut 30:12 It is not in heaven, that you should say, 'Who will go up to heaven for us to get it for us and make us hear it, that we may observe it.

Deut 30:13 Nor is it beyond the sea, that you should say, 'Who will cross the sea for us to get it for us and make us hear it, that we may observe it?'

Deut 30:14 But the word is very near you, in your mouth and in your heart, that you may observe it."

In Rom 10:6-10 Paul quotes parts of this and interprets this in a somewhat figurative

way to look at the law as a type of Messiah, because in the new covenant the law is written in our mind and heart, and Messiah also is in our mind and heart ("Messiah in you, the hope of glory" - Col 1:27). He is our example of keeping the law. The intent of Deut 30:11-14 is that (even though we are too weak to live a sinless life) the law is not too difficult for us to be able to apply it, so that figuratively it is not across the sea. But by analogy, if it was intended for all those with faith down through the ages to keep the month of Abib using an unspecified rule of barley, it would be too difficult (verse 11) because some would indeed have to cross the sea (verse 13). This was given to Moses before the original listeners reached the promised land from which the barley for the wave sheaf offering was to be taken. It was intended that the law be kept down through the ages, not merely in the future when the law will go forth from Zion (Isa 2:3).

[22] Meaning of Lev 2:14-16 which contains *abib*

The following is my very literal painstaking translation from the Hebrew:

Lev 2:14 "And if you-bring an offering of firstfruits to YHWH of ears, you-shall-bring roasted/parched-grain with fire, [that is] fresh-grain crushed-grain [for an] offering of your-firstfruits;

Lev 2:15 and you-shall-put oil upon-it and lay frankincense upon-it; it [is] an offering.

Lev 2:16 And the priest shall bum its-memorial-portion from its-crushed-grain and from its-oil with all its-frankincense, an [offering by] fire to YHWH."

In verse 14 "ears" is the translation from the Hebrew word *abib*. Based upon evidence presented above, this word in itself does not indicate any specific stage in the growth of grain, but the rest of the context does relate to its development; this will be discussed below. This verse does not define *abib* and is merely an example of its use.

In verse 14 "firstfruits" occurs twice and is the translation from the Hebrew word *bikurim,* Strong's number 1061. This word occurs 18 times in the Tanak: Ex 23:16, 19, 34:22, 26; Lev 2:14,14; 23:17, 20; Num 13:20; 18:13; 28:26; II Ki 4:42; Neh 10:35, 35; 13:31; Isa 28:4; Ezek 44:30; Nah 3:12. In several of these contexts it is clear that firstfruits are genuinely ripe, and in all of them it ought to be understood that firstfruits have value, though not necessarily fully ripe. The very first stage of the earing of barley is before the milky stage when nothing of value exists except as food for animals. This does not qualify as firstfruits.

In verse 14 "roasted/parched-grain" is the translation from the Hebrew word *kali*, Strong's number 7039. On page 1102 of HALOT3 "roasted grain" is the meaning. On page 885 of BDB "parched grain" is the meaning. Page 281 of Flannery discusses the purpose of roasting: "Sometime around the end of the Pleistocene, man discovered that by roasting the grain he had collected he could render the glumes so dry and brittle that they could be removed by abrasion. At several sites this was accomplished by roasting the cereals over heated pebbles in a pit or subterranean earth oven (cf. van Loon 73)." When the moisture content of the grain is relatively high so that it is not solid inside, the word parching applies, which connotes drying along with roasting.

In verse 14 "crushed grain" is the translation from the Hebrew word *geresh*, Strong's number 1643. Page 176 of BDB defines this as "a crushing" and "groats, grits". Page 204 of HALOT1 defines this as "crushed new grain, groats". This Hebrew word *geresh* bears no resemblance to the Hebrew words for grind (Strong's numbers 2911, 2912, 2913 found in BDB page 377 column 2). Thus the description in Lev 2:14-16 from *geresh* does not require that flour is obtainable from the abib mentioned in Lev 2:14. *geresh* also occurs in verse 16.

In verse 14 "fresh-grain" is the translation from the Hebrew word *karmel*, Strong's num-

ber 3759. Conflicting opinions abound for the meaning of this word in the lexicons, and reasons for this will now be explained. Pages 325-336 of TDOT discuss this noun. On page 327 the theory that *karmel* means "complete" is mentioned, but in order for this theory to be valid, it requires dropping one consonant from the Arabic verb *kamala*, and Arabic is not an extremely close Semitic language to Hebrew, thus the evidence is weak; but moreover, according to page 327, no Semitic cognate to *karmel* has been found in which the context is similar to its usage in Lev 2:14; 23:14; II Ki 4:42. Examples with the Arabic verb *kamala* do not involve plants. The meaning of *karmel* as "new grain" (in the sense of fresh grain) is discussed on page 328. All three of these verses with *karmel* involve firstfruits. The question is whether there is evidence for the meaning of *karmel* as "newly ripened grain" without using the Talmudic literature, which is favored by some lexicons. The NRSV translates *karmel* as "fresh ears", thus dropping the Talmudic "ripened", and most translations follow this. The REB translates *karmel* as "fully ripened grain" which mixes the meaning of the Arabic verb kamala (complete) with the Talmudic "ripened". In Lev 23:14 three categories of food from barley are mentioned that are not to be eaten before the wave sheaf offering is performed. First is bread, second is roasted grain, and third is *karmel*. In Luke 6:1 we find the case of eating grain fresh and raw directly after picking, so it seems rational that this would constitute the third category of food from grain. This would more fit the meaning of "fresh", i.e., recently picked and without alteration. In Lev 2:14 this would be *karmel* before it was crushed and then roasted. TDOT favors the meaning "new grain", which means fresh grain. The question arises as to how ripe the grain was in Luke 6:1. In this one example it would not have been uncomfortably hard grain, but it may have been in a pre-ripened milky state as noted next.

In footnote 60 on page 44 of Ginsberg we find, "In [Dalman, Vol. 3, 1933] p. 1, Dalman notes that the change from soft-seeded ears to fully ripe ones is marked by a change in the color of the standing grain: barley turns from green to yellow; in wheat, the green fades to a shade that is so light as to be almost white. I have learned further from competent informants in Jerusalem that during the green phase of the standing grain the seeds in the ears are likewise green and that if they are pressed liquid will ooze from them, for which reason this stage is called *havsalat halav*, literally 'milk ripening,' in *Ivrit* [= Hebrew]. It is this term that has inspired my own coinage milky grain." Next Ginsberg states, "Of course milky grain, though it cannot be ground to flour, is not unsuitable as food."

There is nothing that prohibits milky grain from being offered as firstfruits according to Lev 2:14 because milky grain is suitable for food, and based on Luke 6:1 there is no requirement that *karmel* needs to be ripe enough to make flour.

On page 231 of Weis there is a brief discussion of the difference of opinion between the Talmudic Rabbis and certain Karaite opponents concerning Lev 2:14.

"According to the Rabbis, the oblation of fast-fruit in Lev. ii. 14 is identical with the first -fruit-sheaf of barley ordained in Lev. xxiii. 11-12. Otherwise [say the Rabbis] no offering whatsoever could be brought of the new grain [Lev 23:16] before the two loaves have been presented on the Feast of Weeks. According to the Karaites, Lev. ii. 14 is a private oblation brought voluntarily [note Lev 2:14 begins with "if"] by the individual of the first-fruit of his barley, oblations of the new barley being allowed to be offered in the interval between the presentation of the first-fruit-sheaf [wave sheaf] and that of the two leavened loaves. Thus, according to the Karaites, the designation [new grain offering in Lev 23:16] *minchah hadashah* suits the two leavened loaves only in so far as, being of the new wheat, they are a new oblation in kind [different kind of plant], whilst according to the Rabbis, they are new as an offering." The

Karaite view seems more sensible than the Talmudic view.

[23] Wave Sheaf Offering continued (see above on Josh 5:10-12)

The Hebrew word *noof* Strong's number 5130, has been typically translated "wave" as in wave sheaf offering in Lev 23:11, 11, 12, but as now seen in pages 461-473 of Milgrom, there is significant evidence to translate it "elevate" instead. However I will wait until I note some further scholarly confirmation before I use this meaning.

The wave sheaf offering is mentioned in Lev 23:10-14; Deut 16:9-10. Here is a literal translation of Lev 23:10-14; Deut 16:9.

Lev 23:10 "Speak to [the] sons of Israel and say to them, 'When you come into the land which I am going to give to you and reap its harvest, then you shall bring [the] first sheaf of your harvest to the priest.

Lev 23:11 And he shall wave the sheaf before YHWH for your acceptance on the morrow following the Sabbath the priest shall wave it,

Lev 23:12 on [the] day that you wave the sheaf you shall offer a year old male lamb without blemish for a burnt offering to YHWH

Lev 23:13 and a cereal offering with it, two-tenths [of an ephah] of fine flour mixed with oil, an offering by fire to YHWH, a pleasing odor and its drink offering of a fourth of a hin of wine.

Lev 23:14 You shall not eat bread, nor roasted/parched-grain, nor fresh-grain until this same day, until you have brought [the] offering of your Almighty. It is a statute forever throughout your generations in all your dwellings.

Deut 16:9, "Seven weeks you shall count for yourself from [about the time] you begin [to put the] sickle to standing grain, you shall begin to count seven weeks."

The differences between Lev 2:14-16 versus Lev 23:10-14; Deut 16:9-10 are:

(1) Lev 2:14-16 is voluntary because it begins with "if', but the wave sheaf offering is obligatory.

(2) Lev 2:14-16 mentions *abib* but Lev 23:10-14; Deut 16:9-10 does not. I do not necessarily attach any specific significance to this, but am simply noting differences.

(3) In Deut 16:9 "standing grain" is translated from the single Hebrew word *kameh,* Strong's number 7054. This occurs nine times in the Tanak. It refers to mature grain three times: Deut 23:25 (twice); Is 17:5. It refers to immature grain three times: II Ki 19:26; Is 37:27; Hos 8:7. In three cases its stage is not indicated: Ex 22:6; Deut 16:9; Jud 15:5. The flexibility of this word makes it difficult to draw any conclusions from it, except that this word can not be used to show that the wave sheaf offering must be made from ripe grain or even valued grain!

(4) Lev 2:15-16 tells what is to be done with the preparation from Lev 2:14. It is consumed as a valued firstfruits offering. In sharp contrast to this, Lev 23:12-13 tells what is to be done with preparations different from the wave sheaf offering itself. There are no instructions of anything to be done with the wave sheaf offering itself after the waving.

(5) Lev 2:14 mentions firstfruits (Hebrew *bikurim*, discussed above) twice, but Lev 23:10-14 does not have this word at all, and neither does Deut 16:9-10! The voluntary offering of Lev 2:14-16 must come after the sheaf of Lev 23:10 is cut because Lev 23:10 has the word "first", and Deut 16:9 has the word "begin". The Hebrew word translated "first" in Lev 23:10 is *raysheet*, Strong's number 7225, which is the word "beginning" at the start of Gen 1:1. Although translators often translate this "firstfruits" in Lev 23:10, it is not the correct Hebrew word for firstfruits.

Technically, the wave sheaf offering is not a firstfruits offering even though it must

come first! This will be discussed in greater depth in a later section. The most literal translation of the Bible, YLT, translates Lev 23:10, "Speak unto the sons of Israel, and thou has said unto them, When ye come in unto the land which I am giving to you, and have reaped its harvest, and have brought in the sheaf, the beginning of your harvest unto the priest".

Two matters will immediately stand out in this translation. The first is that *raysheet* is translated "beginning", not firstfruits. The second is that since Hebrew verbs typically do not follow consistent patterns regarding the modem concept of verb tenses, Robert Young slavishly uses a uniform policy for certain verb forms in using the English past tense which is often contrary to the context and the original intent. Young wants to avoid making himself an interpreter, so he tries to be consistent even if the verb tense does not make sense. Thus the greatest weakness of YLT is in his rendering of verb tenses.

YLT is noteworthy because it is so literal. In order to show that YLT is not an oddity among translations, it is relevant to point out some other translations that also translate the Hebrew word *raysheet* in Lev 23:10 as "beginning" or "first" instead of "firstfruits". These include the TANAKH (Philadelphia: The Jewish Publication Society, 1985), the Jerusalem Bible (New York: Doubleday, 1966), the Modem Language Bible (Grand Rapids: Zondervan, 1969), the New English Bible (Oxford University Press and Cambridge University Press, 1970), the New International Version (Grand Rapids: Zondervan, 1973), the New Jerusalem Bible (New York: Doubleday, 1985), and the Revised English Bible (Oxford University Press and Cambridge University Press, 1989).

(6) Lev 2:14-16 compared to Lev 23:10-14; Deut 16:9-10 have vastly incompatible descriptions in their formulas of procedure, and the technical terms that are used to describe them are different, so there is no need to assume that the firstfruits offering of Lev 2:14-16 governs the non-firstfruits offering of Lev 23:10-14.

(7) The word "sheaf' in Lev 23:10, 11, 12, 15 is a translation of the Hebrew word omer, Strong's number 6016, which occurs in the following ten other places: Ex 16:16, 18, 22, 32, 33, 36; Deut 24:19; Ruth 2:7, 15; Job 24:10. From Ex 16:36 we see that it is a measure of volume, but its content varies with the context. In these ten places it is accepted that the *omer's* contents have value. There is no explanation of the content in Lev 23:10-15; Deut 16:9-10. Certainly I Cor 15:20, 23 calls Messiah the firstfruits, but I Cor 5:7 calls Messiah the Passover. Just as the Passover lamb is not the firstfruits, the wave sheaf offering is not the firstfruits, yet it is first. The sheaf most certainly has value in its symbolism, but the lack of calling it firstfruits as well as the lack of describing some additional ceremonial use of the sheaf detracts somewhat from literally emphasizing some specific degree of its maturity. This will be discussed further below. I Cor 15:20, 23 does not mention wave sheaf or barley, so there is no reason to force this into the wave sheaf offering.

Lev 23:10 states "first sheaf [*omer*] of your harvest". In light of the absence of any specific statement indicating a necessary degree of maturity for the wave sheaf itself, can the phrase "your harvest" merely be taken to indicate that it is from a field that an Israelite owns that is part of his intended harvest when the time is eventually appropriate for a normally valued harvest of domesticated barley? By way of analogy Messiah was accepted for death and resurrection when still in His relative youth. Messiah was prophesied to be King in Ps 2:2-6, but he did not achieve this value before he was prematurely harvested, and in Acts 1:6-8 He refused to tell His disciples when He would fulfill the prophecy as King in the earthly kingdom (I Tim 6:13-16). He was given the value of the resurrection by a miracle that was not from Himself, but from His Father. He gave up His valued blood for others. The specific statements concern-

ing the wave sheaf offering do not declare any specific degree of maturity of barley to be mandatory.

Lev 23:11 states that the priest will wave it for "your acceptance". Here "your" is the farmer who brought the sheaf. The meaning typically given to the wave sheaf offering has ignored the literal reason, namely, "for your acceptance". When we are called, we are all in a different stage of maturity, in age, in spirituality, and in understanding. But we are all accepted when we have faith and repent. We bring ourselves in repentance as the offering and are accepted. Meanings of ceremonies can be multi-faceted and tricky.

[24] How the Wave Sheaf was Obtained

Lev 23:10 "Speak to [the] sons of Israel and say to them, 'When you come [plural form of the verb come] into the land which I am going to give to you and reap [plural forth of the verb reap] its harvest, then you shall bring [plural form of the verb bring] [the] first sheaf of your harvest to the priest.'"

This definitely does not say that the priest goes out to look for the sheaf (*omer*). Instead it says that "you", the farmers, are to bring it to the priest. The Hebrew verbs for "you come", "reap", and "you shall bring" are in the plural form-see AKOT where the grammatical form of every verb is given. This is similar to the English verb "to be", in which one writes, "I am", "he is", and "they are", so that the form "are" is plural.

It definitely does not say that only one farmer brings the wave sheaf. This is being spoken to all the sons of Israel, not merely to those where the barley is furthest in development. The wave sheaf ceremony occurs on the Sunday during the seven days of unleavened bread as previously discussed along with Josh 5:10-12.

Since the wave sheaf ceremony occurs during the seven days of unleavened bread, and at this time all the men were required to already be at one central place in Israel keeping this feast (Deut 16:16), in order for the farmers to bring it the distance from the field where it grew to the priest at this festival, it must have been cut by the farmer before leaving for the feast. The context definitely does not say that the barley that is brought by each farmer can only be brought if it has reached some specific stage of growth. A good reason why it does not say "firstfruits" (*bikurim*) is that each farmer is required to bring a sheaf regardless of whether it has become useful enough to be called a firstfruit. For some of the farmers it may be that the value of the sheaf is in what it would have become if it had been allowed to develop more instead of being cut before leaving for the feast.

[25] A Valued *omer* for the Wave Sheaf Offering During a Cold Winter

I have already quoted from the personal experiences of Gustaf Dalman concerning the time of the barley harvest in Palestine. Some other sources are now tapped.

On pages 44-45 of Carpenter (who has translated from the Latin of J. D. Michaelis) we find, "Besides, all who in their travels [in Palestine] mention the time of harvest, tell us that corn [barley] grows ripe, and is mowed, in the months of April and May. Rauwolf says, that the harvest commences in the beginning of April; but he is to be understood according to the old [Julian] calendar, and to say that about the tenth of our [Gregorian] April N.S. [new style] the sickle is first put into the early ripe fields of Palestine."

On pages 362-363 of Thomson we find, "I have visited the pilgrims' bathing-place, the supposed scene of this miracle, early in April, and found barley-harvest about Jericho already ended. I also found the [Jordan] river full to the brim, and saw evidence in abundance that it had overflowed its banks very recently [Josh 3:15]. Barley-harvest in the vale of the Lower Jordan begins about the end of March. This seems early, and in fact it is long before the crops are ready

for the sickle on the neighboring mountains, or even around the fountains of the Upper Jordan. But the reason is obvious. The valley at Jericho is thirteen hundred feet below the level of the sea, is sheltered from cold winds on all sides by mountains of great height, and is open to the warm southern breeze from the basin of the Dead Sea. It has, therefore, the climate of the tropics, though in the latitude of Jerusalem."

On pages 487-488 of Ideler we find the following (my translation from the German), "According to the writings of journeys, the accounts of which were collected by Michaelis and exhaustively by Buhle, the barley at the border of Jericho, the warmest region of Palestine, generally reaches to maturity in the first days of our April. From this time onward, when the first ears were offered, one is permitted to begin the harvest, and this continues in the suitable parts of the land to the north near Lebanon until into the last half of May. Hence, here in Palestine the barley begins to ripen about 14 days after the vernal equinox, so we note that the Ears-Month would have begun according to Moses' determination approximately with this time of the year, if it was to be gauged according to the sun."

Now for a conclusion involving a very cold winter in light of the above quote which makes the unstated assumption that some barley would be ripe at the time of the wave sheaf offering. Based on the vernal equinox timing, the earliest date for the wave sheaf offering would be on April 3 or 4 if it were also a Sunday. If, in some year when there is a cold winter, there are no ears of barley capable of being used for flour (i.e., fully ripe) as early as April 3 or 4, the fact that "firstfruits" (the Hebrew *bikurim*) is not used for the wave sheaf offering removes the necessity for any barley being fully ripe.

Unless rain is severely withheld through most of the growing season throughout Israel or some other miracle occurs, there will always be ears that are in the milky stage and which is useful for eating by April 3 or 4 (see footnote 60 on page 44 of Ginsberg which was already quoted above). Of course this implies that there will be *abib* by April 3 or 4 (and indeed there is *abib* many weeks sooner). By this date the wave sheaf offering could always use barley of value (whether in the milky stage or fully useable for flour) if a recognized priest was available.

[26] Exploring Deeper into Deut 16:9 and Counting Pentecost

Is there evidence that the reaping of the barley harvest could not start until the wave sheaf offering had been made? To help answer this question, let us review and compare a literal translation of two passages.

Deut 16:9, "Seven weeks you shall count for yourself from [about the time] you begin [to put the] sickle to standing grain, you shall begin to count seven weeks."

Lev 23:15-16, "And you shall count for yourself on the morrow following the Sabbath, from [the] day you brought the sheaf of waving [to the priest], seven complete/perfect Sabbaths they shall be, until on the morrow following the Sabbath the seventh, you shall count 50 day[s], and you shall present a new offering to YHWH." Here the Hebrew phrase *me-macharat*, meaning "on the morrow following", occurs twice.

The following aspects of Deut 16:9 point out its incompleteness and the omission of details in comparison to Lev 23:15-16.

(1) It makes no mention of 50 days, or even any specific number of days, but instead simply "seven weeks", which is only a rough summary of the days of the count.

(2) It makes no mention of the ending day of the count.

(3) It makes no mention of "Sabbath", thus omitting further detail.

(4) It makes no mention of the phrase "on the morrow following".

(5) It makes no mention of the sheaf.

(6) It does not mention anything about the role of the priest or some ceremony involving the sheaf, and while this is not mentioned in Lev 23:15-16, it is mentioned in Lev 23:10.

(7) It makes no mention of not eating any of the new crop until the day of the wave sheaf offering in contrast to Lev 23:11, 14.

The above comparison shows that Deut 16:9 is a rough summarized statement without precision. The major omissions are the first two aspects regarding the count. However, another significant lack is that where there are English words added in square brackets in the above literal translation of Deut 16:9, if no words are added between "from" and "you", and if no words are added between "begin" and "sickle", the thought is not complete. The words that need to be added are open to question, but whatever words are added, they must be in harmony with the thoughts expressed in Lev 23:10-16. The omissions in Deut 16:9 make it secondary to Lev 23:10-16. It is Lev 23:10-16 that controls the understanding of Deut 16:9, not vice versa.

The question arises as to what specifically must be added to Deut 16:9 in order for it to express a coherent unbroken thought that allows Lev 23:10-16 to control the subject.

Deut 16:9 forces the translator to add the words "about the time", because the day that the farmers cut the first sheaf was before they departed for the festival of unleavened bread, not the day they presented it to the priest.

Since each individual farmer had his sheaf cut before leaving for the feast, and it took each of them some time to travel, the sheafs were not all cut on the same day. Undoubtedly many priests participated in the wave sheaf ceremony because there were many farmers. Nothing in Scripture requires that the day of cutting the first sheaf for any specific farmer also be the day that the farmers presented it to the priest.

The only statement that makes a prohibition is Lev 23:14, "You shall not eat bread, nor roasted/parched-grain, nor fresh-grain until this same day, until you have brought [the] offering of your Almighty." Hence there is no requirement that the standing grain that the individual farmer wants to harvest (if any) before he leaves for the feast must be left standing. Thus the safety of the crop is not threatened by early ripeness in certain areas before the feast of unleavened bread!

The day to start the counting of seven weeks is not clearly indicated in Deut 16:9, but only from Lev 23:15-16 can we know that it was from the day of the wave sheaf offering, not from the day each farmer cut the sheaf in advance of leaving for the feast. Since each farmer had to cut his sheaf in advance of the day of the wave sheaf offering, is there any limitation of how far in advance the fanner may cut the sheaf that he planned to take to the feast for the wave sheaf ceremony? Scripture is silent on this. Once the farmer did cut this particular sheaf first and set it aside for safe keeping to be brought to the feast, is there any Scripture that forbids the farmer from harvesting additional grain before he leaves for the feast?

Since Lev 23:10 mentions "your harvest" and wild barley neither provides a high yield for the effort nor has desirable qualities for normal use, wild barley would not qualify for "your harvest". Only domesticated barley was intended for the wave sheaf offering. But there is no reason why the word *abib* can not include wild barley.

When I spoke with Dr. David Marshall, a barley and wheat geneticist from Texas A & M University about 12 years ago, he told me that when he visited Egypt, the farmers who still used a sickle waited until the barley was at 30 percent moisture or less before harvesting. This was about the first time at which flour could be obtained. This was by experience rather than a scientific measurement, but Dr. Marshall knew the moisture content. They could wait some weeks and let the moisture content decrease, but they could not let it get near 10 percent be-

cause at that point only modern machinery could harvest it without shattering and losing the grain. But winter barley that lies dormant over the winter ripens slowly because the temperature rises slowly. They have some weeks to wait before they will lose it to shattering. A primary difference between wild barley and domesticated barley is that domesticated varieties are bred to enable the grain to stay on the stalk for a much longer time before shattering than wild barley. Wild barley does shatter soon after ripening, but not domesticated barley.

Some Added Conclusions

(1) In Lev 23:10-15; Deut 16:9-10 (the wave sheaf offering) the technical term *bikurim* for firstfruits is NOT mentioned because farmers from throughout Israel were required to bring their first sheaf, and many of these sheafs were in a stage of barley ears that was too early to be firstfruits, yet they were *abib*.

(2) Deut 16:9-10 does not mention firstfruits, nor does it mention harvest, and once the farmer has cut and put aside the first sheaf at any time before he left for the feast of unleavened bread, no Scripture forbids him to harvest the crop if he chooses. Thus the crop is not at risk based upon the day of the wave sheaf offering.

(3) The day of the wave sheaf offering may be thought of as a man having a long leash with a dog at the end. The dog represents the ripening of barley which can wander a little this way or that, but not too far from the day of the wave sheaf offering. Barley in Israel ripens over a seven-week period depending on the location, so that the name *abib* is not descriptive of only one month. It takes a more precise astronomical method to pin down the month of Abib to one month

(4) Gen 1:14 ends in the word "years", so that the lights in the heavens determine years. Moses evidently did not think it was important to describe the astronomical method to define years because the vernal equinox was common knowledge in Egypt where the Israelites had been, being witnessed by the greatest pyramids of Egypt.

(5) There is a count to 50 for the Jubilee year in Lev 25. In Lev 25:8 where it states "... seven Sabbaths of years...", there is no reason to understand "Sabbaths" as meaning "weeks". After counting the first six years, the count for the next year is both Sabbath year number one and year number seven. Repeating this for the next six years to again arrive at year 6, the count for the next year is both Sabbath year number two and accumulative year number 14. Continuing in this way, the count at Sabbath year number three is also accumulative year 21, the count at Sabbath year number four is also accumulative year 28, etc., until the count at Sabbath year number seven is also accumulative year 49. By counting Sabbath years (one through seven), each of which is the culmination of six ordinary prior years, one is indirectly counting 49 years, but the explicit direction from Lev 25:8 in counting Sabbath years from one to seven is perfectly fine and does not require one to translate the word "Sabbaths" as "weeks".

(6) Making the analogy of patterning the count to the jubilee year with the count to the Feast of Weeks transfers the first six ordinary years to the first six ordinary days, and then the Sabbath year to the Sabbath day. Just as the jubilee year is the year after the seventh Sabbath year, Pentecost is the day after the seventh Sabbath day. This analogy would be broken if one starts the count to Pentecost on any day other than the first day of the week.

(7) In Lev 23:16 where it mentions "seven Sabbaths complete/perfect-ones", again the word "Sabbaths" does not have to mean "weeks". The Hebrew word for "complete" also means "perfect" and "unblemished" as an unblemished lamb. Seven is the number of perfection and completeness, so that the Sabbath, being the seventh day, does complete and make perfect that week. "Complete/perfect" refers to the number seven, which defines the Sabbath day number.

Thus a complete/perfect Sabbath may be understood as a "completing Sabbath", i.e., a Sabbath that completes a seven day cycle. If seven continuous days does not end in the Sabbath, those seven days lack the perfection of ending in the seventh day. Thus "seven Sabbaths complete/ perfect-ones", means "seven completing Sabbaths", where a completing Sabbath is understood as a Sabbath that includes the six prior days. While a week is implied, the emphasis is on the fact that the Sabbath makes a completion and perfection in its day number.

(8) The fact that one name of the feast is "Feast of Weeks" does not need to deny the use of the word "Sabbath" having been used multiple times in the description of the count in Lev 23:15-16. There is no context that requires the Hebrew word *shabat* in the Tanak to mean week or seven. There is a different Hebrew word for week and a different Hebrew word for seven. There is no need to confuse the use of these words.

(9) Is there a biblical Hebrew expression for a full or complete week that does not involve the word Sabbath which could have been used if the Sabbath was not involved in a special way in the count to Pentecost? There is. The Hebrew phrase for a "full month" (or complete month) is literally translated "a month of days" in Num 11:20, 21; Deut 21:13; II Ki 15:13. Thus, by analogy, a complete week ought to be "a week of days". Indeed this phrase "week of days" (meaning complete week) does occur in Dan 10:2 and 10:3, which the NKJV and KJV does show with the words "full" and "whole". This shows that the usual way to mention a "complete week", when the Sabbath is not involved, was not used in Lev 23:16.

[27] The Meaning of Deut 16:1

In order to arrive at a proper understanding of a biblical subject or verse it is necessary to first understand the clear Scriptures and then use information from them to eventually understand the unclear ones. Deut 16:1 is an unclear Scripture for at least the following reasons:

(1) The first Hebrew word in Deut 16:1 is *shamar*, Strong's number 8104, which has a variety of possible meanings depending on the context. It primarily may mean "to keep [a law]", "to observe [by sight]", "to preserve or protect", "to celebrate [a festival]", or "to guard [captives]", and some of these meanings can overlap or blend. There is debate over the meaning of *shamar* in Deut 16:1.

(2) Considerable effort has been expended above to show that *abib* means "ears [of grain]" regardless of the stage of ripeness of the ears. But some references have taken only Lev 2:14 and the Talmudic interpretation of *abib* as "nearly ripe, green ears [of grain]" as if this constituted the full scope of its original meaning. Without a thorough study of Ex 9:31 and the hail plague in Egypt in its agricultural, historical, climatic, and geographical context as well as the use of *abib* in the Dead Sea Scrolls, one can not appreciate the full scope of the meaning of *abib*, and this misunderstanding of *abib* has perhaps been the primary cause of confusion over the meaning of Deut 16:1.

(3) Deut 16:1 may be divided into two parts, the first designated 16:1A and the second 16:1 B. The Hebrew word *chodesh*, Strong's number 2320, occurs in both parts. This word either means "new moon" or "month" depending on the context. The full Hebrew expression in which *chodesh* occurs here is "*chodesh ha aveev*" which literally means either "the new moon of *abib*" or "the month of Abib". This exact Hebrew expression occurs six times in Scripture: Ex 13:4; 23:15; 34:18A, 18B; Deut 16:1A, 1B. The context of the five places other than Deut 16:1A show it to mean "month of Abib". Is it plausible to think that in Deut 16:1A this expression means "new moon of *abib*" but in the second half of the same verse (and everywhere else), the same expression has a different meaning? Some people think it is plausible, but in my opinion it is quite unlikely for the expression to change its meaning in only the first half of the

verse.

(4) Another controversial question about the translation of Deut 16:1 involves whether the Hebrew word abib should be translated to emphasize its meaning or transliterated to indicate the name of the month, and this depends on the original intent of the first part of the verse. If the first part of this verse is intended to describe an activity of visual searching as some teach, then the word *abib* should most likely be translated rather than transliterated.

Now that four points of controversy concerning the translation of Deut 16:1 A have been elucidated, it should be clear to the reader that one should not start the study of how to determine the first month with a forced interpretation of this verse. An edifice should be built on a firm foundation, not one that is conceived in debate. In other words the claim is made by some that this verse should start, "Observe [by sight] the new moon of [in which you find] nearly ripe, green ears..." Notice that the added expression "in which you find" is not based on any Hebrew words from Deut 16:1, but is nothing more than a forced wishful interpretation upon the text. This interpretation involves a controversy over the intended meaning of *shamar*, a controversy over the intended meaning of *abib*, a controversy over the intended meaning of *chodesh*, and a controversy over whether *abib* should be translated into its meaning or transliterated as the name of a month. Beyond these four matters of controversy is the issue of adding the expression "in which you find", so that the belief of "physically searching for *abib*" is read into the text, and then this text is used as alleged evidence for this practice to determine the first month.

The clearest way to refute this alleged interpretation of Deut 16:1A is to recognize that *abib* means "ears [of grain]" regardless of the stage of ripeness of the ears. One does not go looking for something that has a wide scope of meaning, otherwise one does not know what to look for. Hence adding the expression "in which you find" is a fallacy as an implied translation. Consistency in translating the expression *chodesh ha aveev* within Deut 16:1 requires that *chodesh* mean "month" here. Deut 5:12 also starts with the word *shamar* and means, "Keep [the laws of] the Sabbath day to set it apart..." Similarly Deut 16:1 means, "Keep [the laws of] the month of Abib and perform the Passover..." The laws of the month of Abib include the laws of the Passover.

The presence of the Hebrew word *chodesh* in Deut 16:1A thwarts the attempt to make to mean, "Observe [by sight] the nearly ripe, green ears..." because *chodesh* stands as a barrier between "observe" (*shamar*) and "*abib*". Besides, *abib* has a wider range of meaning than this and the time at which barley comes to maturity ranges over a seven-week period throughout Israel. Hence observing is not confined to merely one month as though this meant "Observe [by sight] the month of nearly ripe, green ears..." When using an accurate translation of *abib*, the meaning, "Observe [by sight] the month of ears..." still does not make sense because "ears" spans several months from the earliest stage to the last of the harvest.

[28] The First Month During the 40 Years of Wandering in the Wilderness

Num 9:1-14 describes the keeping of the Passover in the wilderness during the first year after the Israelites left Egypt. In order to do this during the 40 years in the wilderness they would have to determine when the first month was.

Num 9:15 "Now on the day that the tabernacle was erected, the cloud covered the tabernacle, the tent of the testimony, and in the evening it was like the appearance of fire over the tabernacle, until morning.

Num 9:16 So it was continuously, the cloud would cover it by day, and the appearance of fire by night.

Num 9:17 And whenever the cloud was lifted from over the tent, afterward the sons of Israel would then set out; and in the place where the cloud settled down, there the sons of Israel would camp.

Num 9:18 At the command of YHWH the sons of Israel would set out, and at the command of YHWH they would camp; as long as the cloud settled over the tabernacle, they remained camped.

Num 9:19 Even when the cloud lingered over the tabernacle for many days, the sons of Israel would keep YHWH's charge and not set out.

Num 9:20 If sometimes the cloud remained a few days over the tabernacle, according to the command of YHWH they remained camped. Then according to the command of YHWH they set out.

Num 9:21 If sometimes the cloud remained from evening until morning, when the cloud was lifted in the morning they would move out; or if it remained in the daytime and at night, whenever the cloud was lifted, they would set out.

Num 9:22 Whether it was two days or a month or a year that the cloud lingered over the tabernacle, staying above it, the sons of Israel remained camped and did not set out; but when it was lifted, they did set out.

Num 9:23 At the command of YHWH they camped, and at the command of YHWH they set out; they kept YHWH's charge, according to the command of YHWH through Moses."

Notice in verse 22 that even if the cloud lingered for a year they remained camped. Their coming and going was strictly governed by the cloud by day and the fire by night over them during the 40 years. The only exception was when the 12 spies were sent out, which occurred before the announced 40 year punishment of wandering in the wilderness (Num 14). There is no hint that they violated the rule of remaining with the miraculous cloud and fire by sending search parties into Israel to seek abib to determine the first month during the 40 years.

[29] Indirect Interpretation of Gen 1:14 and the Jews in Rome

I have seen the proposal that Gen 1:14 may be interpreted so that the sun indirectly affects the barley, which in turn causes the time of the first month. But the trade winds and the rain also affect the temperature, which affects the barley, not only the sun. A prolonged lack of rain also hastens the ripening of barley. Hence this interpretation of Gen 1:14 dilutes the role of the sun to determine the first month and introduces confusion in practical definitions regarding the arbitrary botanical investigation of barley, the wild and domesticated varieties of barley, whether artificial irrigation must be excluded, and the places within Israel to look for it. It would take another direct verse to overturn the directness of Gen 1:14, especially in light of Deut 30:11-14.

In Gen 1:28 we see the command to "Be fruitful and multiply, and fill the earth". In order to keep the days of unleavened bread during the first month while filling the earth, one had to have means for knowing when to do this when far from Jerusalem. Concerning the keeping of Pentecost, in Acts 2:10 we note that festival visitors came from "the districts of Libya around Cyrene, and the sojourning Romans, both Jews and proselytes". A major Jewish settlement around Cyrene was 800 miles from Jerusalem. Rome was about 1500 miles from Jerusalem. While this relates to Pentecost rather than the days of unleavened bread, going to Jerusalem for a seven day festival would be more desirous than for the one day festival of Pentecost. Even those who could not make the long and expensive journey from Rome would still want to observe the days of unleavened bread locally. In commenting on Acts 2:10, page 63 of Bruce states, "There was a Jewish colony at Rome in the second century B.C., and it was augmented

by the Jews who were brought there from Palestine in 62 B.C., to grace Pompey's triumph, and later set free. We have references in Roman inscriptions to at least seven Jewish synagogues in Rome."

It would have been a significant problem for news about barley just prior to the first month to reach Jews about 1500 miles away in Rome in time for the days of unleavened bread for local observance in Rome. This problem is far worse for a person who wishes to travel from Rome to Jerusalem to keep the feast there after hearing the news about the barley in Rome. While hypothetical high speed runners and fire signals might be employed in getting news to Rome in time, this does not help people who want to travel from Rome to Jerusalem to keep the feast after finding out that the month which recently began is the first month. On page 149 of Carson 1974, we read, "To go from Italy to Spain by land would have taken a month, to Alexandria [Egypt] well-nigh two." On page 150 Carson writes, "For travelers heading for the eastern Mediterranean [by ship] from anywhere within the western part of the empire, Rome was far and away the best jump-off point." On page 123 of Carson_1994, we read, "Except for emergencies, the ancients limited their sailing to the season when the weather was most dependable, roughly from the beginning of April to October. The winds over the waters between Rome and Alexandria during this period blow prevailingly from the west. This meant that the voyage from Rome, made with a favorable wind all the way, was quick and easy, taking normally no more than two to three weeks." On page 124 Carson explains that if a person wanted to go from Rome to Palestine, the best choice would be to get on a grain freighter from Rome to Alexandria, and then make the remaining 200 mile journey by land or sea. In summary, if a man left Rome by ship on April 1, which is the earliest time in the year that a ship would leave, he stood a reasonable chance of reaching Jerusalem by May 1. In most years this is too late for Passover. Since a Jew would not want to travel on the Sabbath, it would take about two months to travel from Rome to Jerusalem by land. In any event, news about barley would not come in time to help the Jew from Rome to know when to leave for Jerusalem.

Only an astronomical method that would allow the Jews in Rome to know the first month for themselves would make sense, and this is in harmony with a direct understanding of Gen 1:14.

[30] History of the Karaites

There are Jews in different parts of the world today that call themselves Karaites. The Karaites in Israel today use barley to determine the fast month. Since many people receive emails from them, we now devote some space for a brief discussion about their history and the calendar.

Page 20 of Ankori states: "Ever since the famous century-old theory of Geiger linked the early Karaites with the internal conflicts of the Second Jewish Commonwealth, scholars did not cease to detect ancient antecedents in Karaite ideology. Geiger and his successors hailed the Karaites as spiritual heirs, nay, actual survivors, of the seemingly extinct Sadducee party. On closer analysis, however, Sadduceeism in its classical definition seems to have played in the Middle Ages the role of a haunting historical recollection rather than an actual source of influence, an amorphous symbol of dissent rather than a definitive sectarian identity."

On page 777 of Gil we find, "The origins of the Karaites and their early development are shrouded in obscurity. The sources which describe these beginnings single out the figure of 'Anan, who is considered the founder of Karaism." On page 778 we read: "As to the Karaite sources themselves, Qirqisani says that 'Anan lived in the days of the second Abbasid caliph, the founder of Baghdad, Abu Ja'far al-Mansur (754-775), which fits what has been said above."

On page 22 of Schur (1992) we see, "Modern research does not accept the traditional Karaite version, which regards Anan unreservedly as the founder of the Karaite sect. Most scholars stipulate now the existence of two separate groups:

* the Ananites, followers of Anan and sometimes actually members of his family;

* the Karaites, who were the outcome of the coalescence of various sectarian groups."

On page 211 of Schur (1995) we find, "Now that Anan's real position in Karaite history begins to be better understood, Benjamin Nahawendi looms much larger, as he was the first real leader and unifier of the sects which eventually made up Karaism. He hailed from Nihavend in Persia (in the province of Media), and might have lived (in the first half of the ninth century) in Persia or in Iraq. Page 213 states: "Nahawendi's importance is attested to by medieval Arabic accounts, which call the Karaites 'the followers of Anan and Benjamin'. Saadia Gaon and Judah Halevi regarded Anan and Nahawendi as the two founders of Karaism."

On page 448 of Ben-Sasson we find, "The diversity between the Karaites themselves resulted from the rationalistic individualism of this trend in the tenth century." Page 449 states: "According to the Karaites, the individual is duty bound to rely on his own intelligence and to understand the Holy Scriptures independently."

The Karaite named Levi ben Yefeth wrote a book about 1006-7 in which he mentions three prevalent views of how to determine the first month. This is reported on pages 303-304 of Ankori. The first view he presents is that of the Rabbanites who use the modern calculated Jewish calendar. The next quotation from pages 303-304 has square brackets with words added by Zvi Ankori in the midst of his translation from Levi ben Yefeth, where we read: "The second group consists of people in the Land of Shine'ar [= Babylonia) from among our brethren the Karaites. They follow the [computation of the vernal] equinox alone; yet, they stipulate certain conditions, which are different from those stipulated by the Rabbinates. This is why we have listed this group as separated from the Rabbinates... Now, this second group does not inquire, nor search, for the abib at all; [its members simply] wait and do [the proclamation of Nisan] when the sun reaches the Constellation of the Ram..."

In the Middle Ages the Constellation of the Ram meant the 30 degree segment of the zodiac beginning with the vernal equinox, not the actual star group that formed the constellation.

Next, on page 304, Zvi Ankori, continues his translation: "The adherents of the third group [i.e., the Palestinian-oriented Karaites] observe [the New Year] on the strength of *abib* alone and they do not investigate [the position of] the sun at all."

The following paragraph appears on page 326 of Ankori: "Thus, in the case of an unusually early ripening of barley in Palestine, the twelfth month of the Karaite calendar-year, Adar, would yield to Nisan, the first month of a new year. Indeed, an actual occurrence is cited when the Purim Festival, due to fall, as a rule, in the middle of Adar, was shelved altogether to make way for Passover, which falls in the middle of the succeeding month of Nisan."

Footnote 66 places this in the year 1006-1007. In Est 9:19-23 it is clear that the Jews had decided that every year on the 14th and 15th days of the 12th month Adar they would celebrate Purim. Hence they understood that every year had to have at least 12 months, but the Karaites who used barley apparently accepted the viewpoint that some years might only have 11 months based on the state of the barley.

In Poland today (and scattered elsewhere in eastern Europe) there are Karaites that follow the second group above, which uses the vernal equinox and not the barley to determine the first month.

In discussing the Karaites, pages 392-393 of Nemoy state, "Some of them begin the '(month of the) fresh ears' (with the appearance) of (any kind of) green herbage, whereas others do not begin it until (fresh) garden-cress is found all over Palestine; others begin it only when (at least) one piece of ground becomes ready for harvest; still others begin it even when only a handful of corn is ready for harvest." This indicates that Karaites in the Middle Ages who wanted to use vegetation to determine the first month could not agree among themselves on the method, undoubtedly because the Bible does not provide a botanical description for the month of Abib.

[31] Genetics of Barley

Concerning the genetics of the earing of barley, page 149 of Nilan states, "The inheritance of the time of heading in barley ranges from fairly simple to very complex. Several reports have indicated a 3:1 segregation ratio with early (Doney 1961; Gill 1951; Grafius, Nelson, and Dirks 1952; Murty and Jain 1960; Ramage and Suneson 1958; Scholz 1957) or late (Bandlow 1959; Frey 1954a; Scholz 1957) being dominant. Two-factor pair inheritance was reported (Frey 1954a) with late dominant to early. Fiuzat and Atkins (1953) found that the date of heading in two crosses appeared to be controlled by a single major gene pair plus modifying factors, an indication of some of the complexities of the inheritance of this characteristic. Yasuda (1958) reported on two-factor pairs responsible for the difference between early and late varieties. He labeled the genes 'AA' and 'BB' with 'AA BB' varieties 60-days earlier than 'aa bb' varieties. Each allele appeared to be additive, and no interaction between genes in the F1 hybrid was noted." The point here is that different varieties of barley behave differently with regard to reproductive timings. Presumably, if farmers planted one variety of barley as opposed to another in the appropriate place, they could manipulate the calendar for those who wanted to use barley to determine the first month.

[32] Ending of Ex 9:32

When Ex 9:31-32 was quoted above from the NASB, the last Hebrew word was translated "[ripen] late". This Hebrew verb is AFEEL, Strong's number 648, but the specific verb form is AFEELOT. When discussing this word on page 357 of DCH, a translation of the end of Ex 9:32 is given with the words "the wheat and the spelt were not damaged for they are late (crops)". Thus DCH translates AFEELOT as "are late (crops)". Pages 46-47 of Klein translate AFEEL as "ripening late", and Klein relates this to the Akkadian (Assyrian) word APATU "to be late". Klein is especially careful in applying the scientific principles of etymology to words, even using the words "possibly" or "probably" to show speculation, and when there are no grounds for speculation, Klein says nothing. Klein is an excellent source for correcting older sloppy careless guesses for etymology. Page 128 of Cohen_1978 translates this "late (of crops)". On the same page Cohen_1978 writes, "Contrast both KB1, 77, and HALAT, 76, where the attempt to derive this term from the root OFEL 'to be, made dark' is semantically impossible and must be rejected." Cohen is stating that he agrees with the two German lexicons (which he abbreviates KB and HALAT, and which I looked up) that AFEEL is not derived from a word that means "to be made dark". Perhaps the reason for this fuss by Cohen is that on page 66 of BDB, for AFEEL, we see "(darkened, concealed, thence) late, of crops", so that BDB seems to be attempting to etymologically derive this word from "darkened". None of the modem Hebrew lexicons agree with BDB on this and there is no evidence for this.

[33] Example of a Year with 13 Months

The time difference between Ezek 1:1-2 and Ezek 8:1 is the difference between month 4 day 5 in the 5th year of King Jehoiachin's exile and month 6 day 5 in the 6th year of his exile.

This is 14 or 15 months depending on whether the 5th year of his exile had 12 or 13 months. If the difference is 14 months, this is about 29.5 times 14 (= 413) days with an overestimate of 30 times 14 (= 420) days. The overestimate of 420 days is 17 days short of the known events because Ezek 3:15 accounts for 7 days and Ezek 4:4-6 accounts for 390 plus 40 days, the total being 437 days. Thus the difference must have been 15 months which is about 29.5 times 15 (= 442.5) days, just five or six days more than the known events of that time period.

If one should claim that the 5th year of the king's exile was a solar year, and an overestimate of 366 days ("leap" year) plus 60 days (two extra months) is allowed, the total is 426 days, which is still far short of the 437 days for the known events.

Thus the biblical year is not a (pure) solar year, and there is a biblical example of a year with 13 months. This shows that a biblical year is not a solar year.

[34] Control of the Temple, and thus the Calendar, in the Early First Century

Both Sadducees and Pharisees are condemned in the New Testament in the sense of having incorrect teachings (Mat 16:6, 11-12); thus one can not look to either of these groups as having the original biblically correct understanding of some particular doctrine merely because of the label of the group attached to the doctrinal opinion.

(a) Many of the Scribes were Sadducees. Mat 23:2

Luke 20:27 [NKJV] Then some of the Sadducees, who deny that there is a resurrection, came to [Him] and asked Him,

Luke 20:28 saying: "Teacher, Moses wrote to us [that] if a man's brother dies, having a wife, and he dies without children, his brother should take his wife and raise up offspring for his brother. [Speech continues through verse 33]

Luke 20:34 Response to the Sadducees: "The sons of this age marry and are given in marriage." [Speech continues through verse 38]

Luke 20:39 Then some of the scribes answered and said, "Teacher, You have answered well."

Luke 20:40 But after that they dared not question Him anymore."

From verse 39 it is clear that scribes had been there all along, and from verses 27 and 40 it is clear that these scribes were Sadducees. In fact the Sadducees would not have asked Him this sensitive question if Pharisees had been present because that would have immediately sparked a heated debate between the two groups over their difference on this issue.

Acts 23:9 makes it clear that some scribes were Pharisees. Hence scribes included some Sadducees and some Pharisees.

On page 22 of Bar-Ilan we find the following paragraph: "Most of the scribes of the end of the Second Temple period whose genealogy is known were priests: Yosef (T. Shabbat 13:11), Yohanan (P. T. Maaser Sheni 5:4, 56c), Beit Kadros (T. Menahot 13:19), Josephus and others. It is clear that during the time of the Temple, priests, some of whom were scribes, used to manage the Temple property, contributions and gifts in addition to annual tithes (Neh 13:13; T. Shekalim 2:14-15; Josephus, War 6:387-91). The Temple as the official cultural-religious center was also the center of the knowledge of reading and writing, and because of that the priests in charge of the Temple were evidently responsible for the preservation of the Torah, its copying in general and the scribal profession in particular." Thus in the view of Bar-Ilan, a historical expert in the realm of scribes and priests in the first century, we see the priests in charge of the Temple and the scribes heavily represented by priests. Some writers have been unaware of the representation of priests among the scribes and have given a distorted picture of Mat 23:2.

Acts 5:17 [NKJV] "Then the high priest rose up, and all those who [were] with him (which is the sect of the Sadducees), and they were filled with indignation." This shows the chief priests to be almost synonymous with the Sadducees.

Thus, when we see Mat 23:2 [NASB] "The scribes and the Pharisees have seated themselves in the chair of Moses", the scribes are mentioned first, and they have a major representation from among priests, which were seen to be closely equated with or within the Sadducees. Hence Matthew is not excluding the Sadducees from Moses' seat, and the mention of Scribes (which includes Sadducees) comes first. There are three primary biblical functions of the Levitical priesthood. The fast concerns the performance of the sacrificial system including personal counseling with those who bring sacrifices for personal reasons (such as to atone for their sins) and rituals at the sacred alter for the holy days, the Sabbaths, the new moons, and the daily sacrifices. The second concerns teaching the law to the people, which is shown in Mal 2:7 and Heb 7:11. The third concerns the prominent role of the priests and Levites throughout the court system of Israel according to the law of Moses (Deut 17:9; 19:17; 21:5). Thus the priests were to officiate at the holy alter, teach the people, and judge legal cases.

Let us consider the meaning of "Moses' chair or seat" from Mat 23:2. Moses did have the supreme role in the first primitive court of one man in Israel. In Ex 18:13-26 we see the role of Moses as the civil judge rather than in the role of communicating the law from YHWH to the people. Ex 18:13 has the expression "Moses sat to judge the people". This sitting implies a chair or seat of office for judging. The Hebrew word shaar, Strong's number 8179, is normally translated gate, but it sometimes means "court". Deut 16:18 [NKJV] "You shall appoint judges and officers in all your gates [courts]..." Amos 5:15 [NKJV] "Hate evil, love good; establish justice in the gate [court]". On page 1045 of BDB the second meaning of this word is "space inside gate, as public meeting-place, market", and within this category, BDB later adds "where elders, judges, king, sat officially". Examples of sitting in the gate (meaning court) include Gen 19:1; Ruth 4:1-2; II Sam 19:8; 1 Ki 22:10; II Chr 18:9; Est 2:19, 21; Job 29:7; Prov 31:23; Jer 38:7. The advice of Moses' father-in-law in Ex 18:13-26 was a pyramid structure of judges, but in Num 11:16-17, 24-25 this pyramid structure was replaced by a flat structure (equal authority) of 70 men of the elders of the people, and this flat structure is not called a single body; the implication is that they were spread all through the people of Israel as a system of equal local courts (perhaps a few men per court), and that cases too difficult for them went to Moses. At the end of the 40 years in the wilderness, more details about the future court system were revealed in Deuteronomy, where Deut 17:9; 19:17; 21:5 show the prominent role of the priests and Levites throughout the court system of Israel according to the law of Moses. Yet before this was revealed, nothing was said in Num 11:16-17, 24-25 about tribal representation of these 70 men.

From biblical examples, Moses' chair or seat sensibly means the official seat from which civil case judgment comes, a judicial function, not a legislative function. This is neither the changing of existing laws, nor the legislation of new laws, but the application of existing laws to specific cases in dispute between relevant parties who seek to bring their case to a civil court. Priests would not consider their procedures to be under the jurisdiction of a civil court. Civil justice of disputes does not include the methods and rules whereby the priests carried out their functions, which were not civil disputes in nature.

(b) The Parable of the Wicked Vinedressers

Luke spent considerable time with Paul (a former Pharisee) - see Col 4:14; II Ti 4:11 and the "we" portions of Acts that includes the presence of Luke as the author - Acts 16:10-17; 20:5 - 21:13; 27:1 - 28:16. Luke partially relied on Paul for some of the relations between the

leaders of the Jews when he wrote. Paul, having been a Pharisee and living in Jerusalem, would have been an excellent first hand source of extra background information for Luke's writings.

Luke 20:9 [NKJV] Then He began to tell the people this parable: "A certain man planted a vineyard, leased it to vinedressers, and went into a far country for a long time.

Luke 20:10 ...the vinedressers beat him...

Luke 20:11 ...they [the vinedressers] beat him also...

Luke 20:12 ...they [the vinedressers] wounded him also...

Luke 20:13 ...I will send My beloved son...

Luke 20:14 ...vinedressers ... reasoned among themselves ... let us kill him.

Luke 20:15 ...they [the vinedressers] ...killed [him]. Therefore what will the owner of the vineyard do to them?

Luke 20:16 He will come and destroy those vinedressers and give the vineyard to others." And when they heard [it] they said. "Certainly not!"

Luke 20:17 Then He looked at them and said, "What then is this that is written: 'The stone which the builders rejected has become the chief cornerstone!'

Luke 20:18 Whoever falls on that stone will be broken; but on whomever it falls, it will grind to powder."

Luke 20:19 And the chief priests and the scribes that very hour sought to lay hands on Him, but they feared the people - for they knew He had spoken this parable against them.

The parallel passage in Mark starts in Mark 11:27 where it mentions "the chief priests, the scribes, and the elders came to Him". The continuous flow of the narrative goes down to Mark 12:12 "And they [chief priests, scribes, and elders] sought to lay hands on Him, but they feared the multitude, for they knew He had spoken the parable against them."

The parallel passage in Matthew begins in Mat 21:33 and ends in Mat 21:45-46, "Now when the chief priests and Pharisees heard His parables, they perceived that He was speaking of them, but when they sought to lay hands on Him, they feared the multitudes, because they took Him for a prophet."

In this parable the phrase "the stone which the builders rejected" is mentioned in Mat 21:42; Mark 12:10; Luke 20:17 directly before the conclusion which shows that the leaders of Israel correctly perceived He was talking about them as the builders who rejected Him (the stone), and also about them as the vinedressers who killed Him (the son). Israel is the vineyard.

In the midst of the conclusion to this parable, when He says, in Mat 21:43, that "the kingdom will be taken from you", it is clear that He is agreeing with their interpretation that they are the leaders and that the kingdom refers to Israel and especially its government.

Luke says "chief priests and scribes", Mark says "chief priests, scribes, and elders", and Matthew says "chief priests and Pharisees". Despite these differences, all three mention chief priests first. These leaders understood that they themselves were the vinedressers in the parable, and the vineyard was Israel. Thus the parable teaches that at the time near the death of Messiah the leading position was in the hands of the chief priests, which were Sadducees, but the Pharisees also had some leadership. This is the clearest statement of which group held the leading position from the standpoint of the seat of semi-autonomous government permitted by the Jews under the Roman Empire.

(c) How the High Priest Spoke to the Audience that included the Pharisees

John 11:47 [NKJV] Then the chief priests and the Pharisees gathered a council and said, "What shall we do? For this Man works many signs.

John 11:48 If we let Him alone like this, everyone will believe in Him, and the Romans

will come and take away both our place and nation."

John 11:49 And one of them, Caiaphas, being high priest that year, said to them, "You know nothing at all,..."

For the high priest to say to his audience that included the Pharisees "you know nothing at all", it seems obvious that he was not concerned that the Pharisees had so much authority over the Temple that they could push him around as they might choose.

(d) Pilate's Understanding of the Chief Priests' Authority

Mark 15:10 [NKJV] For he [Pilate] knew that the chief priests had handed Him over because of envy.

If the chief priests did not have primary authority, but instead the Pharisees controlled the Temple, the chief priests would have had less reason to be envious of Messiah's authority through His miracles. Instead the Pharisees would have played a more prominent role during the trial.

(e) The Role of Gamaliel and Legal Authority of the Chief Priests

Acts 5:34 [NKJV] "Then one in the council [= Sanhedrin] stood up, a Pharisee named Gamaliel..."

If Gamaliel was the head of the Sanhedrin this would not merely say "one in the Sanhedrin". The language shows that Gamaliel was not the head of the Sanhedrin. Acts 9:1-2 [NKJV] "Then Saul, still breathing threats and murder against the disciples of the Master, went to the high priest and asked letters from him to the synagogues of Damascus so that if he found any who were of the Way, whether men or women, he might bring them bound to Jerusalem." Acts 26:10 "This I [Paul] also did in Jerusalem, and many of the saints I shut up in prison, having received authority from the chief priests; and when they were put to death, I cast my vote against them." Acts 9:14 is similar. Acts 26:12 "While thus occupied, as I journeyed to Damascus with authority and commission from the chief priests..." Here Paul who identifies himself as a Pharisee (Acts 26:5; Phil 3:5) and as a student of the Pharisee Gamaliel (Acts 22:3) does not go to any supposed Pharisaic leader for legal authority, but rather to the chief priests. Paul's personal identification with the Pharisees would have caused him to go to the Pharisees for authority if they could give it.

Acts 22:30 [NKJV] "The next day, because he [the Roman commander] wanted to know for certain why he [Paul] was accused by the Jews, he released him from his bonds, and commanded the chief priests and all their council [= Sanhedrin] to appear, and brought Paul down and set him before them." Here the Roman commander shows that he understands "their Sanhedrin" to be that of the chief priests despite the fact that in Acts 23:6 Paul perceives that both Sadducees and Pharisees were present. Thus the chief priests were dominant.

The Pharisees did have sufficient clout in the local synagogues that they could excommunicate Jews from the life of the synagogue (Jn 9:13, 21-22, 34; 12:42). However, this environment is not the Temple where the chief priests (Sadducees) were dominant.

The Greek word for Sanhedrin, Strong's number 4892, occurs 22 times in the New Testament (Mat 5:22; 10:17; 26:59; Mark 13:9; 14:55; 15:1; Lk 22:66; John 11:47; Acts 4:15; 5:21, 27, 34, 41; 6:12, 15; 22:30; 23:1, 6, 15, 20, 28; 24:20). In three of these places (Mat 5:22; 10:17; Mark 13:9) a local court is the meaning, but in all other 19 cases this is the Sanhedrin in Jerusalem associated with the Temple. In 17 of these 19 cases the Greek definite article is used which implies that there is only one headquarters Sanhedrin. The two exceptions without the definite article are Mark 15:1; John 11:47.

(f) Talmudic Portrayals of First Century Authority in Judaism

We will discuss in more depth the following introductory statements. Orthodox Judaism elevates the Babylonian Talmud to the level of Scripture and its scholars seek to defend this position. It is to be expected that they would reject the New Testament. The Talmud portrays Gamaliel as the head of the Sanhedrin and the Pharisees as in control of the Temple during the first century. Gamaliel is described in the Babylonian Talmud as determining intercalation of the 13th month. But most other Jewish and non-Jewish scholars agree that the priests controlled the Temple while it still stood.

On page 13 of Neusner_1994 (an internationally recognized authority on the Talmud and a conservative Jewish scholar), we find the following concerning the Talmud and Rabbinic writings of the same period, "Sayings and stories were made up and attributed to prior times or authorities." On page 68 Neusner writes: "Ample evidence in virtually every document of rabbinic literature sustains the proposition that it was quite common for sages to make up sayings and stories and attribute the sayings to, or tell stories about, other prior authorities. Considerations of historical fact did not impede the search for religious truth: the norms of belief and behavior. That is why, if all we want are historical facts, we cannot believe everything we read except as evidence of what was in the mind of the person who wrote up the passage: opinion held at the time of the closure of a document."

David Kraemer, a Jewish professor at the Jewish Theological Seminary of America in New York wrote the following two paragraphs at the start of his chapter on page 201:

"Scholars, mostly Jewish but also non-Jewish, have been using Rabbinic sources for historical study for well over a century. These studies - one 'History of the Jews in the Talmudic Period' or another - have been, almost without exception, what Jacob Neusner terms 'gullible.' They have assumed, in other words, that the Rabbinic record can, more or less, be taken at its word and that, once one has determined the 'original version' of a teaching and discounted obvious fabulous material, one may accept that teaching as historically reliable.

By this stage in the development of Judaic scholarship, the folly of these earlier habits is broadly recognized. Neusner and others have pointed to a variety of crucial and even fatal flaws in the approach just described, and there is hardly a scholar writing today about the history of Jews in late antiquity who does not at least pay lip service (though often no more than lip service!) to the much repeated critique. But even the critical questions that have been articulated - Can we believe Rabbinic attributions for purposes of dating a tradition? Why should we believe what any given tradition reports? and so forth - do not capture the full scope of the problem of using such records for writing history. In the following pages, I will describe the obstacles that would have to be overcome before we could be sure that a Rabbinic record contains historically reliable evidence. I will conclude that these obstacles are effectively insurmountable, and that most sorts of political, social, or religious histories cannot be constructed on the basis of Rabbinic testimony."

Note that at the end of the above quotation Kraemer states that Jewish political history cannot be constructed from Rabbinic writings, which especially includes the Talmud, the first part of which is the Mishnah, dated about 200 CE.

In footnote 38 on page 98 of Grabbe_1997 we find, "[Talmud tractate] Rosh ha-Shanah normally assumes that the sages [non-priests] sat to receive witnesses [of having seen the new moon]. However, [Mishnah) M. Rosh ha-Shanah 1.7 mentions that the witnesses reported to the priests; this datum which goes against the views of the rest of the tractate is likely to have been a genuine memory of pre-70 times when the priests - not the rabbis - declared the sacred calendar."

On pages 35-36 of Green we read, "Before the fall of the Jerusalem temple in A.D. 70, the priests proclaimed the sacred times of the year. In the aftermath of the temple's destruction, the new rabbinic movement appropriated that priestly task to itself."

On page 81 of Neusner_1984 we have, "The Pharisees before 70 did not control the Temple and did not make laws to govern its cult [the Levitical priesthood]. But afterward, they made plans for the conduct of the Temple when it would be restored."

On page 39 of Cohen 1986 we see, "Our methodological dilemma is heightened when we confront a contradiction between rabbinic and non rabbinic sources. The most prominent example of this sort of difficulty is the nature and composition of the Sanhedrin. Rabbinic texts, both legal and anecdotal, regard the Sanhedrin as a supreme court cum senate, populated by rabbis and chaired by two rabbinic [non-priestly] figures. Josephus refers to a *koinon* and *boule* as well as a *synedrion*. From Josephus we do not know whether these are all one and the same institution and whether these are permanent or ad hoc bodies, but we see that aristocrats and high priests as well as Pharisees figure prominently in the discussion of these matters. The testimony of the NT matches that of Josephus (except that the NT does not use *koinon* and *boule* to refer to a supreme council in Jerusalem). How do we resolve this contradiction? Should we conclude that the composition and leadership of the Jewish supreme council changed over the centuries and that the rabbinic and Greek sources reflect different stages in this development? Or should we conclude that Josephus and the NT present a basically accurate picture which the rabbis have 'corrected' and improved either through wishful thinking or intentional distortion?"

I conclude that after 70 CE when the Temple was destroyed, the successors of the Pharisees overturned certain practices of the priests and later rewrote history to favor their views. I do not believe that Gamaliel the Elder controlled the calendar as the Babylonian Talmud indicates through their alleged quotations.

I believe that the successors of the Pharisees departed from the calendrical practices of the priests and destroyed all writings of the Sadduceean priests. Not a single document written by a Sadducee survives and the Talmud ridicules the Sadducees and others associated with them. In order for the Talmudic portrayal of the Pharisees from before the destruction of the Temple to demonstrate the alleged authority of the Pharisees, the Talmud uses the illustration of the control of the calendar by specific primary leaders of the Pharisees. The Talmud asserts the authority of Gamaliel the Elder and his grandson Gamaliel II by employing a calendrical method that requires the judgment of an authority figure. As if merely using the ripeness of barley were not complicated enough (what variety, where to look, how to define ripeness, et cetera), they even allegedly included other criteria that required a judgment based upon a combination of factors (even ripeness of fruit trees along with considering the date of the equinox). No precisely defined formula is given for the time before the Mishnah so that an authority figure becomes a requirement.

(g) Josephus on the Biblical Court System and the Biblical King

In matters pertaining to human authority over the Israelite people concerning the biblical court system, it is instructive to see how Scripture compares with Josephus. Deut 17:8-13 discusses what to do when difficult legal cases arise and the local judges cannot decide. Verse 8 together with Deut 12:5 (as interpreted in the later context when Jerusalem would be the capital city), indicate that such cases would be transferred to Jerusalem. Deut 17:9 explains what should happen next. The authority figures are mentioned in Deut 17:9 [NKJV], "And you shall come to the priests, the Levites, and to the judge there in those days, and inquire of them; they shall pronounce upon you the sentence of judgment." Verse 12 states that the verdict is given by

"the priest" or "the judge". This should be understood in light of Deut 19:17 where a single case is brought before "the priests and the judges". When this is read by itself without looking outside the Bible for interpretation, we do not read about one national body meeting under one roof (one Sanhedrin), but instead, individuals from among priests, Levites, and "the judge"; however, an unstated quantity of these people judge each case. Verse 9 indicates a plurality of people in authority with emphasis on priests and others of the tribe of Levi, but people from other tribes are not excluded from serving on the court. In Deut 21:5 where the cities all over the country are in the context (verses 1-9), the priests are said to be involved in settling every dispute. There is nothing specific in the Tanak to cause one to insist that the same single body of people in Jerusalem is to judge every case that cannot be decided by local courts throughout the land.

Note that Deut 17:8 does say "gates", which means courts, and it should be accepted that Deut 17:9 necessarily implies at least one court for judging civil cases brought to it from local courts. This permits the likelihood, especially if the population is large, that there would be a group of high level courts in Jerusalem, and any case that is too difficult for the local courts may be assigned to one of these courts. On the other hand, this may also be interpreted so that if the population were large, Jerusalem would have an intermediate level of courts that would first consider cases brought to it from local courts, and then any cases that could not be resolved by these intermediate level courts would go to one highest court. The Pentateuch does not assign any specific role to the high priest within the court system, but priests do have a prominent role throughout the court system (Deut 17:9; 19:17; 21:5). When reading Josephus concerning the court system, we must carefully distinguish between his portrayal of the law of Moses and his statement of what actually happened in Jerusalem according to his personal experience as he chooses to tell it. After devoting a considerable number of pages to history, Josephus returns to discussing the law of Moses, and provides a prefatory comment as follows in Ant 4.196 (pages 569, 571 in Josephus_4), "But here I am fain first to describe this constitution, consonant as it was with the reputation of the virtue of Moses, and withal to enable my readers thereby to learn what was the nature of our laws from the first, and then to revert to the rest of the narrative. All is here written as he left it: nothing have we added for the sake of embellishment, nothing which has not been bequeathed by Moses." The readers of Josephus understand the constitution to be the laws by which the country is governed, and he uses this word to refer to the laws of Moses that pertain to the government and possibly some other laws as well.

In Josephus's version of the local courts in the law of Moses, he wrote (page 579 in Josephus 4), "As rulers let each city have seven men long exercised in virtue and in the pursuit of justice; and to each magistracy let there be assigned two subordinate officers of the tribe of Levi." Here Josephus adds specific numbers of people to serve as rulers, and he certainly does not leave out the tribe of Levi entirely, but he does not require any role for priests and insists on at least a minor role for Levites. This is clearly a distortion of the major biblical role for priests.

We next examine the situation in which a case is too difficult for a local court. This is parallel to Deut 17:9. A careful translation of Josephus's Ant 4.218 is given on page 32 of Pearce, "But if the judges do not understand how they should give judgment about the things that have been laid before them - and many such things happen to people - let them send the case up untouched to the holy city, and when the chief priest and the prophet and the senate [Greek: sunedrion (Sanhedrin)] have come together, let them give judgment as to what seems fit." Note that Deut 17:9 gave a primary role to the priests and Levites without mentioning the high priest. Josephus adds the high priest, but does not insist on any other priests, although he

may assume this is to be included in the Sanhedrin. He also maintains that Moses intends there to be only one high court, the one national Sanhedrin. Josephus also includes "the prophet" within the meeting of the Sanhedrin, a matter about which Moses wrote nothing. In several ways Josephus distorts the natural meaning of the biblical account.

Several years after Josephus wrote his "Antiquities of the Jews", he wrote his last work, "Against Apion". In this last work he was not giving a thorough treatise on the law of Moses, but he did mention the attitude of the Jews toward this law, and then he made a few statements about the law in relation to the court system. In AA 2.183 (page 367 of Josephus_1) he wrote, "To us [Jews], on the other hand, the only wisdom, the only virtue, consists in refraining absolutely from every action, from every thought that is contrary to the laws originally laid down." Concerning the court system he contradicted his earlier statements above where he previously diminished the role of the priests in the court system and governing in general, except for the high priest. In AA 2.187 (pages 367, 369 of Josephus_1) he wrote, "But this charge [for the priests] further embraced a strict superintendence of the Law and of the pursuits of everyday life; for the appointed duties of the priests included general supervision, the trial of cases of litigation, and the punishment of condemned persons." In AA 2.193-194 (page 371 of Josephus_1) he wrote, "The priests are continually engaged in His worship, under the leadership of him who for the time is head of the line. With his colleagues he will sacrifice to God, safeguard the laws, adjudicate in cases of dispute, punish those convicted of crime." In this context Josephus is summarizing the ideal form of government as a theocracy as it was supposed to be in the sacred writings of the Jews. Here he makes no mention of what happened in his lifetime. Of course he knew the correct biblical role of the priests in the court system when he wrote his earlier work, but in that earlier work he deflated the role of the priesthood, and this points out his bias when he has motives for changing things. However, even in his last work he did not mention Levites, but only the subgroup of the Levites called priests. Often scholars disagree with one another in their conjectures for his motives.

In Deut 17:14-20 Moses describes the appropriate behavior for future kings of Israel, and this does not show the king to share his ruler ship with other men. Comparing this to the corresponding description in Josephus, we see the following on page 583 of Josephus_4, Ant 4.224, "Let him [any future king of Israel] concede to the laws and to God the possession of superior wisdom, and let him do nothing without the high priest and the counsel of his senators..." Here Josephus puts a non-biblical restraint upon the king's authority so as to force him to share it with the high priest and a body of officials. Josh 2 describes the spying mission of two men into Jericho, and verse 23 states [NKJV], "So the two men returned, descended from the mountain, and crossed over; and they came to Joshua the son of Nun, and told him all that had befallen them." Comparing this to the corresponding description in Josephus, we see the following on page 9 of Josephus 5, Ant 5.15, "So having made this compact, they departed, letting themselves down the wall by a rope and, when safely restored to their friends, they recounted their adventures in the city. Joshua thereupon reported to Eleazar the high priest and to the council of elders what the spies had sworn to Rahab; and they ratified the oath." Here Josephus portrays an authoritative decision to accept the private agreement between the two spies and Rahab being officially accepted only by mutual agreement of Joshua along with the high priest and a senate. Thus Josephus shows Joshua as unable to make this authoritative decision alone.

These several examples of biblically distorted interpretation from Josephus show a bias of elevating the authority of the high priest and one national senate or Sanhedrin so that Joshua and future kings are expected to share authority with them rather than act alone in political or

civil matters. This had the effect of weakening the authority of Joshua and the kings of Israel, all one man rule. But in "Antiquities of the Jews" Josephus diminished the role of the priests and Levites in the court system of Israel compared to the Tanak. Yet in "Against Apion" Josephus gave proper emphasis to the priesthood, but still neglected the Levites.

On page 290 in the concluding chapter of his second book about Josephus, McLaren writes the following.

"This study has focused on the implications of trying to make use of the gold-mine, particularly in terms of the nature of the relationship between Josephus, his narrative of events, and contemporary scholarship, in the reconstruction of first-century CE Judaea. Scholars have increasingly voiced the need to display caution in the application of Josephus's narrative in an effort to understand the dynamic of the society. In fact, reference to Josephus without some introductory words of caution is now extremely rare. With Josephus we are dealing with a biased source. In itself, such a statement should not be a concern. Josephus has provided his own understanding of what happened and scholarship has labeled this his bias.

The gold-mine begins to take on the appearance of a minefield. The one and only substantial narrative of events pertaining to the first century CE is biased. If we are to establish a means of understanding the data it is of fundamental importance that we be able to distinguish between the bias and the narrative of actual events. Where the real problem lies is being able to stop before we become dependent on Josephus's interpretation."

Scholars have debated much about the nature of the biases of Josephus. On the whole, His account of actual events (not general statements) that involve Jewish leadership during the first century before the outbreak of the war with Rome in 66 shows that the chief priests could not be overruled by the Pharisees. Scholars have pointed out that in some ways Josephus's account of the war with Rome in his Wars of the Jews contradicted his account of this same war in his Antiquities of the Jews which he wrote later. Josephus's very general statements about Jewish authority also differ when comparing his Wars with his Antiquities. His Antiquities of the Jews was completed in 93/94 CE, more than two decades after the Temple was destroyed and the priests lost their source of wealth, their Temple with their control of it, and their legal power as recognized by the Roman authorities. Josephus's general statements about the control by the Pharisees in his Antiquities shows that the Pharisees could manipulate the priests any way they wished, but unfortunately Josephus does not state what years this situation prevailed, i.e., whether it was only after the destruction of the Temple.

On pages 198-199 of Grabbe_2000 we see the following concerning Josephus's remarks about Jewish leadership: "Those sources [in Josephus] which give the Pharisees a general dominance of a religious belief and practice are those which come later in relation to parallel sources. Thus, it is only two later passages in the Antiquities which state that public worship is carried out according to Pharisaic regulations and that the Sadducees are required to follow them even when they hold office. This is not stated in the War and is not brne out in Josephus's other passages on the Pharisees [in the first century]."

In view of Josephus's bias and his statement that he decided to follow the way of the Pharisees in his public life, one must take his statements relating to calendrical matters as a reflection of Pharisaic positions from after the destruction of the Temple, and therefore of little value for proving Jewish practice during the early first century.

In summary, the view of the New Testament should prevail, which is that before the Temple was destroyed in 70 CE the priests (Sadducees) were dominant in matters pertaining to the Temple (which included the governance of the calendar).

[35] Luke 2, the First Month, and Philo

Luke 2:41-42, "His parents went to Jerusalem every year at the Feast of the Passover. And when He was twelve years old they went up to Jerusalem according to the custom of the feast." This shows that Messiah kept the Passover with His parents every year according to the first month as determined by the Jews at the Temple, and from II Cor 5:21; 1 Pet 2:22 He never sinned. This shows that the method used to determine the first month at the Temple during the early first century was correct. Another Scripture that corroborates this is I Cor 15:3 which states that "He died according to the Scriptures", and this means that He died as the Passover lamb (I Cor 5:7). Thus He died according to Lev 23:5 which states, "In the first month on the 14th [day] of [the] month between the two evenings [is the] Passover to YHWH". Luke 2 is the primary witness for the correctness of the applied calendar of Judaism at the Temple in the early first century. This was controlled by the priests.

There is a Jewish witness whose writings date from the early first century who discusses the meaning of Gen 1:14 and Ex 12:2. This witness is Philo of Alexandria. This witness would be of no consequence and irrelevant if the applied calendar of Judaism at the Temple in the early first century was not correct. We now discuss certain aspects of Philo's writings and thinking, and quote from him. It is necessary to establish some relationship between the calendar of Judaism at the Temple and Philo's thinking in order for Philo's comments on Gen 1:14 and Ex 12:2 to be relevant.

Philo writes on pages 139, 141 of Philo_7 (Special Laws 1.67-70), "There is also the temple made by hands; for it was right that no check should be given to the forwardness of those who pay their tribute to piety and desire by means of sacrifices either to give thanks for the blessings that befall them or to ask for pardon and forgiveness for their sins. But he provided that there should not be temples built either in many places or many in the same place, for he judged that since God is one, there should be also only one temple. Further, he does not consent to those who wish to perform the rites in their houses, but bids them rise up from the ends of the earth and come to this temple. In this way he also applies the severest test to their dispositions. For one who is not going to sacrifice in a religious spirit would never bring himself to leave his country and friends and kinsfolk and sojourn in a strange land, but clearly it must be the stronger attraction of piety which leads him to endure separation from his most familiar and dearest friends who form as it were a single whole with himself. And we have the surest proof of this in what actually happens. Countless multitudes from countless cities come, some over land, others over sea, from east and west and north and south at every feast. They take the temple for their port as a general haven and safe refuge from the bustle and great turmoil of life, and there they seek to find calm weather, and, released from the cares whose yoke has been heavy upon them from their earliest years, to enjoy a brief breathing space in scenes of genial cheerfulness. Thus filled with comfortable hopes they devote to the leisure, as is their bounden duty, to holiness and the honouring of God. Friendships are formed between those who hitherto knew not each other, and the sacrifices and libations are the occasion of reciprocity of feeling and constitute the surest pledge that are all of one mind."

On page 369 of Hay we read, "Philo speaks often of the Jews as a nation ([Greek Strong's number 1484] *ethnos*) or race ([Greek Strong's number 1085] *genos*)..." As an example of this collective sense of the Jews everywhere as one nation (*ethnos*), Philo writes on page 55 of Philo_7 (Decalogue 96), "The fourth commandment deals with the sacred seventh day, that it should be observed in a reverent and religious manner. While some states celebrate this day as a feast once a month, reckoning its commencement as shown by the moon, the Jewish nation

never ceases to do so at continuous intervals with six days between each." In this quotation Pluto distinguishes between a "state" as a political subdivision of the world or as a province of the Roman Empire in comparison to the "nation" of Jews which is not a political subdivision because Jews are in all subdivisions, yet collectively one nation as a religious and culturally distinct people, yet with minor differences within that "nation". Philo uses *ethnos* in the same sense as in John 18:35 (nation); Acts 10:22 (nation). Philo uses *ethnos* in the same sense as in II Cor 11:26 (countrymen); Gal 1:14 (nation). The Jewish nation is especially identified by the Sabbath, circumcision, the clean food laws, recognition of the Scriptures as sacred, and a common mental identity. Only by a further study of an individual's views can one assess his relationship to Jews as a whole. We have already seen that Philo recognizes only the one Temple in Jerusalem as valid, and that he speaks very favorably of Jews everywhere going to the festivals at this one Temple.

On page 63 of Grabbe_1995 we see, "No better example of a Hellenistic Jew can be found than Philo of Alexandria (c. 20 BCE to 50 CE). He was a member of a long-established wealthy family, which possessed Alexandrian citizenship. He shows evidence of a good Greek education and seems to have known only Greek; all the evidence available indicates that he had little or no Hebrew." Later on the same page we find, "Philo was, however, also a completely observant Jew who identified with the Jewish community and religion."

On page 4 of Sandmel we read, "The [Jewish] community [in Alexandria] appears to have been formed at the time of the founding of the city by Alexander the Great in 332 [BCE]. Some seventy-five years later that community had largely forgotten the ancestral Hebrew in which Scripture was written, and the spoken Aramaic of Judea. Fidelity to Judaism, and some noticeable abundance of Jews, impelled a translation of the Five Books of Moses into Greek." This was the first part of the Septuagint.

On page 364 of Hay we read, "He [Philo] writes within some considerable and long-standing tradition of Hellenistic Jewish thinking in Alexandria, thinking that accepts the Septuagint as an inspired form of the Scriptures and is unembarrassed by study of Hellenistic culture, especially philosophy, finding in such studies not grounds for cognitive dissonance with Judaism but rather ideas and methods that can reveal new depths of meaning in the Mosaic texts." Philo uses some version of the Septuagint (= LXX) that we no longer possess, although printed versions of the LXX available today are probably similar to Philo's Bible.

On pages 97, 99 of Philo_8 (Special Laws 4.143) we read from Philo, "Another most striking injunction [law] is that nothing should be added or taken away, but all the laws originally ordained should be kept unaltered just as they were" (Deut 4:2; 12:32). Although he properly understands this from Scripture, he unfortunately does not use the Hebrew text, so his understanding is distorted according to the inaccuracies of the LXX. On page 441 of Amir we find, "Such examples could be multiplied ad lubitum. They show that Philo uncritically accepted the Septuagint text he had before him as identical with the Hebrew Bible. Otherwise he could not have extracted from it the deeper layers of Mosaic wisdom supposedly hidden in every fine nuance of word-choice." If Philo had known Hebrew, he would have been able to recognize that the LXX had inaccuracies when compared with the Hebrew text.

On page 341 of Borgen we see, "Was Philo then fundamentally Greek or Jewish? His loyalty to the Jewish institutions, the laws of Moses, the role of Israel as the priesthood of the world, and his harshness against renegades (even to the point of advocating lynching) shows that he was fundamentally a Jew." On page 879 of Mondesert we read, "We have evidence that Philo did not live on the fringe of his religious community, nor of Alexandrian society; first

and foremost from his work, where on every occasion both his deep attachment to the faith and traditions of his fathers and also his knowledge of the activities of the city, with its theatres, gymnasia, its stadium, its banquets and shows and its commercial and financial activity are found. It is significant that his co-religionists chose him as ambassador to Caligula in 39-40. In such circumstances only a man who was important in the city could be appointed."

Philo wrote of one journey that he made to Jerusalem, and we have no knowledge of any other visits (page 894, Mondesert). His single statement concerning his only known visit to Jerusalem is on page 501 of Philo_9 (On Providence, 2.64) where we find, "While I was there at a time when I was on my way to our ancestral temple to offer up prayers and sacrifices I observed a large number of pigeons at the cross roads and in each house, and when I asked the reason I was told that it was not lawful to catch them because they had been from old times forbidden food to the inhabitants." The scarcity of his personal visitation to Jerusalem could probably be explained by his lack of knowledge of Hebrew and Aramaic, the languages in which services were sure to have been conducted at the Temple.

How did Philo's writings survive, and did later Jews distort his writings? Pages 16-17 of Runia address this as follows, "The result of our enquiries so far is a complete vindication of the judgment of Cohn and Wendland that the survival of Philo's writings was entirely dependent on the intervention of the Christian authors. Pagans were not greatly interested in his thought; Jews either ignored him or condemned him to silence."

What does Philo think of the priesthood? On pages 145, 147 of Philo 7 (Special Laws 1.79) Philo writes, "The nation has twelve tribes, but one out of these was selected on its special merits for the priestly office, a reward granted to them for their gallantry and godly zeal on an occasion when the multitude was seen to have fallen into sin through following the ill judged judgment of some who persuaded them to emulate the foolishness of Egypt and the vainly imagined fables current in that land, attached to irrational animals and especially to bulls." On page 189 (Special Laws 1.157-158) Philo continues, "All these [Levites] have the tithes appointed as their wages, this being the portion settled on them [Levites] as temple attendants. It should be noted that the law does not allow them to avail themselves of these tithes until they have rendered other tithes from them treated as their own property as firstfruits to the priests of the superior class." Philo's statements about the Levites and the priests are always positive, and he calls the priesthood the superior class. He never hints at any corruption in the priesthood and he treats the priests with a respect that the Pharisees would never have done (see Acts 5:17; 23:6-10). Philo never mentions the term "Sadducee" or "Pharisee" and avoids discussing Jewish politics in Jerusalem. On page 36 of Sandmel we find, "Philo is quite external to the Rabbinic tradition in his basic religiosity." Since Acts 2:10 mentions people from Egypt present during Pentecost, and Philo is a witness that people from his region go to the Temple during the festivals, Philo should be aware from those that make these festival journeys that there were Sadducees and Pharisees, and that there were differences in belief among them, but one would never suspect this from his writings. He writes from his own understanding and does not appear to concern himself with whether he may differ with others in Jerusalem.

When facing the questions of how accurately Philo represents the teaching of the Bible and how accurately he describes the practice of the Jews of his day, two points stand out. The first point is that since he uses the Septuagint as his Bible, we can expect him to make any errors that stem from that version which differ from the Hebrew text. For example, the LXX of Lev 23:10-16 claims that the wave sheaf is to be offered on the second day of unleavened bread; hence Philo makes this error as expected. On pages 405, 407 of Philo_7 (Special Laws

11.162) Philo writes, "But within the feast [of unleavened bread] there is another feast following directly after the first day. This is called the 'Sheaf,' a name given to it from the ceremony which consists in bringing to the altar a sheaf as a first-fruit, both of the land which has been given to the nation to dwell in and of the whole earth, so that it serves that purpose both to the nation in particular and for the whole human race in general." This illustrates how Philo follows the LXX in doctrine and how he embellishes Scripture with allegorical meaning. The LXX states in Lev 23:11, using Brenton's translation, "On the morrow of the first day the priest shall lift it up.

The origin of the disagreement over when to begin the count to the Feast of Weeks may go back to 300 BCE. Philo's statement and the LXX do not imply that the priests at the Temple in Jerusalem were using this date for the wave sheaf offering; it only implies that Philo was faithful to the biblical text that he had. Jews from Alexandria who desired to go to the Temple for Pentecost would have to know to plan to get there by the date that the priests actually used for Pentecost, so that the difference between the priests (who always began the count on a Sunday) and the Pharisees (who preferred the method indicated in the LXX) had to be common knowledge in Alexandria. Philo undoubtedly believed that the priests were biblically incorrect in this matter because his Bible made their view incorrect, but he makes no other comment despite the fact that he shows only a favorable attitude toward the priesthood. A Jewish writing known as the *Megillat Taanit* which was largely composed about the time of the destruction of the Temple preserves a record that the method of counting Pentecost was changed to what it eventually became. The record of an approximate time for this change is indicated in the Babylonian Talmud by associating the account in the *Megillat Taanit* with the victorious debater and Jewish leader after the destruction of the Temple named Yohannan bar Zakkai. This implies that the method of counting was different before his leadership, i.e., before 70. The *Megillat Taanit* itself is better evidence than the Talmud, but in itself it says very little. Thus the historical evidence for the time of the change in counting Pentecost is weak, but that is all there is.

For the second point that stands out in recognizing the perspective of Philo, let us now quote from him. On page 279 of Philo_6 (Life of Moses 1.4) we read from Philo, "But I will disregard their malice, and tell the story of Moses as I have learned it, both from the sacred books, the wonderful monuments of his wisdom which he has left behind him, and from some of the elders of the nation; for I always interwove what I was told with what I read, and thus believed myself to have a closer knowledge than others of his [Moses'] life's history." Here we see Philo's admission that he mixed the Scripture (for him the LXX) with the tradition of his Jewish teachers in stating his views. When he engaged in allegorical interpretation, he alone bears responsibility, although he may be repeating views from his teachers. When Philo wrote "from some of the elders of the nation", this undoubtedly means his Jewish teachers in his greater environment. Such teaching would likely be a supplement or an interpretation to the Septuagint rather than a contradiction to it. If a verse in the LXX is vague, the possible interpretations are open to regional bias.

Philo avoids claims that the Jews have doctrinal unity, but he does not display a knowledge of any disunity. His writings only indicate that he visited the Temple once, so he need not be well informed about doctrinal interpretations there. We have seen that Philo recognizes the cohesion of the Jewish people everywhere in calling them a nation, and acknowledges and speaks favorably of those Jews who go to the one Temple on the festivals. He writes as one who is part of the mainstream of Judaism. As long as the Septuagint would not force a strange calendrical concept, it would hardly make sense for him to write against a calendrical concept that

prevails by the priesthood in Jerusalem. Specifically, it would not make sense for him to contradict the method used at the Temple to determine the first month because doing so would make him at odds with his own encouragement for Jews to attend the festivals at the Temple. If the first month is not correct, then none of the festivals of that year would be correct.

In Gen 1:14 where the Hebrew text has the plural of *moed*, which is typically translated seasons or festivals, the Septuagint has the Greek word *kairos* (Strong's number 2540). The various versions of the Jewish Aramaic paraphrased translations of the Hebrew Bible known as the Aramaic Targums all interpret *moed* to include the meaning festivals. The Jewish commentaries of the middle ages also agree with this understanding of *moed*. In Lev 23 the Hebrew *moed* occurs six times: Lev 23:2, 4, 37, 44. The association of *moed* with festivals is clear from its use in Lev 23 as well as in Ps 104:19 and elsewhere. In contrast to this, *kairos* occurs in Lev 23:4, but nowhere else in the Septuagint of Lev 23. *kairos* is a very general word for time in Greek, and it is not noted for being associated with the festivals or any other regular repetitive time. Thus one would not particularly expect Philo to interpret *kairos* as festivals, and indeed Philo does not interpret it that way. But he does use the word *kairos* in discussing this portion of Gen 1:14, indicating that his version of the LXX Gen 1:14 is similar to the one that is commonly available to us.

Philo discusses Gen 1:14-16 on pages 34-47 of Philo_1 (On the Creation 45-61). On pages 44-45 (paragraph 59) Philo writes, "By 'appointed times' [*kairos*] Moses understood the four seasons of the year, and surely with good reason."

It is a little humorous that he puts this interpretation in Moses' mind as if to say this is what Moses knew it to mean rather than this is Philo's interpretation. Since the four seasons are bounded by the equinoxes and the solstices, he certainly believes that Gen 1:14 includes these astronomical events. On pages 46-47 (paragraph 60) Philo continues, "The heavenly bodies were created also to furnish measures of time: for it is by regular revolutions of sun, moon, and the other bodies that days, and months, and years were constituted." Since the calendar is based on these units and he declares these units to be based on measures of time of the heavenly bodies, he leaves no place for the barley to be the determining factor for the first month. The reader might be curious about why Philo wrote here "and the other bodies". While we know that the Greek astronomer Hipparchus proved that the stars drift very slowly from the equinoxes, and he discovered this about 100 years before Philo was born, this knowledge had not been popularized and accepted, so that Philo does not know this. Thus Philo implies the thought that the cycle of the appearance of stars agrees with the sun's signs of the equinoxes and solstices that make the seasons.

Philo writes on page 151 of Philo_7 (Special Laws 1.90), "Who else could have shown us nights and days and months and years and time in general except the revolutions, harmonious and grand beyond all description, of the sun and the moon and the other stars?" Again Philo leaves no place for the use of barley in calendrical determinations. If, on an annual basis, the Jews in Alexandria had to wait for a report on the state of the barley from the priests in Judea in order to know when to leave for a journey to keep the feast of unleavened bread at the Temple, Philo would not neglect such an important annual event in its role to determine the time of the first month. In this matter the Septuagint has no distortion that would give Philo a reason to have a prejudice against the use of barley, but he surely knows nothing of the role of barley in the early first century to determine the first month.

Having examined Gen 1:14 in Philo's writings, the next step is to consider his comments on Ex 12:2. In order to properly evaluate this, certain terminology of Philo and his age needs to

be discussed first. One concern is the meaning of "the Ram" (also called Aries which is the Latin word for Ram) in the sense of the first of the twelve annual signs of the zodiac. According to pages 594-595 of HAMA (volume 1) secular writers of the first century wrote that the eighth day of the Ram is when the venial equinox occurred. However, the elite group of Greek astronomers who employed mathematics considered the first day of the Ram as the day of the vernal equinox (page 600); it took a few centuries for Roman society to gradually accept the astronomers definition.

Philo was not studied in the area of astronomy and would have used the secular meaning. Hence Philo speaks of the vernal equinox as being in the Ram instead of occurring at the start of the Ram. Secular society also considered the autumnal equinox to occur on the eighth day of the sign of the zodiac called the Scales.

With the help of a little sloppiness in the existing translations it is easy for readers to become confused about what Philo means. To help explain one confusing part of Philo's writings I made a word for word translation from the Greek. Here is my literal translation of Philo's On the Creation, paragraph 116 (in chapter 39) on pages 92-95 of Philo_l: "The sun, too, the great lord of the day, bringing about two equinoxes each year, spring and autumn, the spring in [the] Ram and the autumn in [the] Scales, supplies very clear evidence of the sacred dignity of the seventh [number], for each of the equinoxes occurs [near a] seventh month, and during them [these seventh months] there is enjoined by the law the keeping of the greatest national festivals, since [during] both of them [these seventh months] fruits of the earth ripen, [in the] spring indeed grain produce and all else that is sown, and [in] autumn the [fruit] of the vine and most of the other fruit trees."

One peculiar thing to notice here is that Philo uses the word "spring" twice as though it meant "spring equinox" and the word "autumn" twice as though it meant "autumn equinox". Elsewhere he seems to use the word "equinox" to mean the season that it begins; for example, he writes separately of the feast of trumpets at/in the autumn equinox and the feast of tabernacles at/in the autumn equinox. Philo enjoys analogies, symmetry, and approximation in his writings.

Philo discusses Ex 12:2 on pages 2-5 of Philo_QE (Exodus, Book 1.1). On page 2 he writes, "'This month (shall be) for you the beginning of months; it is the first in the months of the year.' (Scripture) thinks it proper to reckon the cycle of months from the vernal equinox. Moreover, (this month) is said to be the 'first' and the 'beginning' by synonymy, since these (terms) are explained by each other, for it is said to be the first in order and in power; similarly that time which proceeds from the vernal equinox also appears (as) the beginning both in order and in power, in the same way as the head (is the beginning) of a living creature. And thus those who are learned in astronomy have given this name to the before-mentioned time. For they call the Ram the head of the zodiac since in it the sun appears to produce the venial equinox." Then on page 3 he writes, "And that (Scripture) presupposes the vernal equinox to be the beginning of the cycle of months is clear from the notions of time held in the ordinances and traditions of various nations." As a commentary to this last sentence, page 391 of Samuel states, "In the areas of Syria and the East controlled by the Seleucid kings, the Macedonian calendar was adjusted to make its months coincide with the months of the Babylonian calendar, which was in turn regulated locally by a nineteen-year cycle. The system was in general, use in the East, and persisted in an adjusted form in cities all over the eastern regions well into the period of Roman domination." The first day of Nisan in the Babylonian calendar since 499 BCE fell on or after the venial equinox in every year except that in 465 BCE it fell one day before the vernal equi-

nox. When Philo speaks of the "traditions of various nations", from Samuel's statement he is referring to the continuation of the Babylonian calendar whose first month did not precede the vernal equinox. This is the only place where Philo makes a statement about the first month that is capable of some explicit comparison with the vernal equinox.

In none of this is there any use of barley to determine the first month, and the Septuagint does not force Philo to take his position. There is never a hint that the Jews in Alexandria waited with anticipation to hear the news of barley reports so they could begin their plans for the Passover.

[36] Issues Against the Position that *abib* Determines the First Month

(1) Ex 9:31-32 in its context shows that *abib* includes a multitude of stages of the growth of the ear of barley. One text in the Dead Sea Scrolls shows it to mean fully ripe ears. With such a variance in the inclusive meaning of *abib*, how can it be used to determine the first month?

(2) The presence of *abib* in Israel applies to several months from the meaning of *abib*, so that its name does not uniquely determine a month.

(3) Since Moses never went into Israel and did not know when barley grew through its various stages there, and since the stages of barley growth in Egypt are different from the stages of barley growth in Israel, how would he know to think about barley growth in Israel in relation to the first month at the time that Ex 12:2 was told to him given that there is no mention of barley or *abib* in the immediate context of Ex 12:2?

salem to keep the feast after finding out that the month which recently began is the first month. If using barley is the proper method, what advice does one give to the Jew in Rome who wants to go to Jerusalem for Passover?

(9) What Scripture is strong enough to overturn the direct cause and effect statement in Gen 1:14 that the lights in the heavens are for festivals and years? Neither Lev 23:10 nor Deut 16:9 provides a direct statement that the wave sheaf offering determines the first month.

(10) Ezra 6:15 and Neh 6:15 tie in with Gen 1:14 to give the biblical and archaeological evidence that together show explicit evidence that Gen 1:14 involves the vernal equinox so that the first month begins on or after the vernal equinox. The Hebrew word TKUFAH can mean equinox or solstice.

(11) Philo of Alexandria explains Gen 1:14 and Ex 12:2 without the use of barley, and with the use of the vernal equinox. He makes a reference to the vernal equinox as used by other nations which would necessarily be the continuation of the Babylonian calendar which did not allow the first month to precede the venial equinox.

[37] Appendix A: Smith's Paper

Complete W. Robertson Smith reference, except for a section written in Arabic for which Smith includes a translation, which he puts in quotation marks shown in the published paper and which is copied below.

NOTE ON EXODUS IX. 31, 32

1. All over Egypt it is common to raise at least two crops of barley - *shitawi* and *seifi*. See Lane, Modem Egyptians, ch. xiv., from which it will be seen that the *seifi* or summer crop is sown about the vernal equinox or later, and so has no bearing on the text before us. Dr Grant-Bey of Cairo, who has kindly made a series of enquiries for me among natives and Europeans who know the country parts of Egypt, says however that in the Sharkiya district there are sometimes three crops of barley, and about Mansura and in the Gharbiya even four. What follows refers to the winter crop (*shitawi*).

2. The data of the harvest varies greatly in different parts of Egypt. From the Rev. Mr Harvey of the American mission Dr Grant got the following dates, applicable to the country south of Cairo:

(a) The barley is in ear from the latter part of February to 15th March.

(b) The flax is in flower from January 10th and in seed from February 15th.

(c) When the barley is in ear the ears of wheat begin to form, but the grains are in a milky state.

The difference between 3(u)-p01maay[( )] 21(butm3 (i227)o1i2)a.

THE CALENDAR OF YAHWEH REVEALED IN THE BIBLE

"What a preposterous idea" says one so-called student, who is also a writer about the Bible. "There is no complete calendar revealed in the Bible," he goes on to say. There are bits and pieces, here and there, but unless you have outside technical information, you cannot construct the so-called "Hebrew calendar." This booklet will prove that THE CALENDAR OF YAHWEH is totally revealed in the Bible. And, that the Hebrew Calculated Calendar that is so widely used is not THE CALENDAR OF YAHWEH.

THIS BOOKLET IS THE RESULT OF THE RESEARCH AND STUDIES OF OTHERS AND GRATEFULLY RECOGNIZES THEIR CONTRIBUTIONS.

Herb Solinsky, who as a young man in Hebrew school, asked the question. If we are to visually observe the new moon, why do we begin the month with the conjunction, when you cannot see the moon? Herb Solinsky's lifetime of studies and research are probably the most complete on the subject of the calendar, as it relates to the Bible. Herb Solinsky's research is available in printed form or on seven hours of video, and in booklet form 'The Calendar GOD Gave to Moses.'

John Trescott, whose eye opening, easy to understand, booklets entitled 'What is Holy Time' and 'Whose Calendar - GOD'S or the Jews?' will have a major impact on the reader. A must read for the serious Bible Calendar student.

Jack Hines, who is savvy with the computer, as it applies to the new moons as they track around the world, and over Jerusalem. Jack Hines' easy to understand charts show where the new moons are, on an hour-by-hour, day-to-day basis. Jack Hines' available booklet is entitled 'GOD'S Calendar in the Heavens.'

The conversion of these three men, guided by the SPIRIT of YAHWEH, plus their dedication to the finite points of the truth on this matter of the calendar, make them qualified, in the eyes of YAHWEH, to be trusted and relied upon. Their addresses will be given at the end of this booklet.

THE BEST PLACE TO START EXPLAINING THE SUBJECT OF THE CALENDAR IS AT THE BEGINNING.

As we turn to Genesis 1:14-19 and understand that, it is YAHWEH who is fully responsible for the sun, the earth and the moon in their courses. YAHWEH says there are two lights that are used for 'signs' [Strong's Concordance here in after referred to as SC #226 a signal and as evidence]. Both of these lights **signal** us when some thing is about to happen, and they are the **evidence** that it is happening. These two lights are for 'seasons' [SC #4150 moed, a fixed season, a festival, a solemn holy meaning, feast or season]. These two lights are for 'days' [SC # 3117 as in sunset-to-sunset, meaning 24 hours, or as in the daylight and nighttime part of the 24 hours, or it can mean just the daylight part of the 24 hours]. These two lights are for 'years' [SC #8141 a year as in a revolution of time, also Gesenius #8141 the course of the sun, the changes of seasons]. What YAHWEH is telling everyone who understands the Bible is that the **sun and moon signal** and give **evidence** to mankind that the **day**, the **year** and the **seasons** of the **year**, most especially the **festival seasons** are upon us, and there is a *solemnity* to it. Which is why we get the term, YAHWEH'S SACRED CALENDAR.

NOTE: There are Bible scholars more learned than this author who says that the word

moed or **moedim** only means the festival seasons, and does not mean the seasons of the year. On pages, three and four below we also explain the meaning of the word **tkufah,** which specifically means or refers to the four turns [by inference seasons] of the year. The primary **tkufah** is the spring equinox, because from it, YAHWEH'S calendar and the festival seasons are reckoned. Without the **SPRING EQUINOX**, there can be no Festival Seasons. The **spring equinox** [the beginning of the spring season] and the **festival [holy days] seasons** are inextricably knotted together. Therefore, the spring equinox, which is used for a sacred use, will be included by this author, seeing it is a 'fixed season.'

THE WEEK COMES TO US BY DIVINE REVELATION.

Notice the obvious absence of the week, as delineated by the two lights. The week comes to us by divine revelation only. Genesis 2:1-3 YAHWEH reveals the week to Adam [and all mankind], when he says "And YAHWEH blessed the seventh day and sanctified it." YAHWEH and YAHWEH alone own and lays claim to the week. No wonder there has been repeated attempts to dismantle and/or lengthen the week.

YAHWEH'S MARKING OF TIME IS BOTH SOLAR AND LUNAR, AND IT REQUIRES BOTH TO PROPERLY DELINEATE ALL FACETS OF YAHWEH'S CALENDAR

The sun begins and ends the day, but the moon lights up the night. The sun with the earth's axis delineates the four seasons of the year, but the moon delineates the festival seasons and is interlinked with the four seasons, most especially the spring season. The sun with the earth's orbit determines the 365 1/4 days of revolution but the moon determines the beginning of the next [new] year.

YAHWEH REVEALS THE BEGINNING OF HIS YEAR TO BE THE FIRST NEW MOON AFTER THE SPRING EQUINOX, AND TO COUNT TO THE BEGINNING OF THE FOURTEENTH DAY TO START PASSOVER [A FESTIVAL SEASON].

The next scripture to examine is Exodus 12:1-2 and it shows us clearly, that it is the YAHWEH who says, " this month [new moon] shall be unto you the beginning of months [new moons]: it shall be the first month [new moon] of the year [a revolution of time] to you." The word for month is [SC # 2320 chodesh] and its only meaning is 'the new moon;' it does not mean month except in the sense as is quoted in Isaiah 66:23 "from one new moon to another." The root word for 'Chodesh' is [SC # 2318 chadash] [see Gesenius' Lexicon] and it means 'a new, sharp, polished, splendid [magnificent], sword; as in a curved sword or a scimitar. Other references are to it being as a sharp sickle. Here we see that the word means 'new moon' and, when on the new moon day, which is a little more that 29 1/2 days after the last new moon, we look up into the western sky, right after sunset, we see a bright, curved, slender, stripe of moonlight. You look with your eyes and observe the new moon. Psalm 81:3 says we are to blow the trumpet [SC # 7782 shophar, a curved horn, a ram's horn] on the new moon. One purpose for blowing the shophar was to announce to the community that the new moon was sighted, thus beginning a new 29 1/2 plus days [a month]. The new moon could be sighted on the 29th or the 30th day, depending on when the inexact 29 1/2 plus days began.

Exodus 12:6 says we are to count, from this first new moon of the year, up to the beginning of the fourteenth day, and then observe the Passover. Deuteronomy 16:6 says to begin observing the Passover at even, at the going down of the sun, as the day begins. Genesis 1:5, 8, 13, 19, 23 and 31 all show that the day began at sunset. Leviticus 23:32 is proof positive that the day begins at even [evening, sunset], and it lasts from even at the beginning of the day until

even as the next day begins.

THE FOUR SEASONS OF THE YEAR ARE REVEALED BY YAHWEH, IN THE BIBLE, AND ARE CONFIRMED IN THE HEAVENS BY THE 365 1/2 DAYS OF A REVOLUTION OF TIME.

In Genesis 8:22 as the flood waters were receding, YAHWEH iterates to Noah that while the earth remains, seedtime [SPRING] and harvest [AUTUMN], and cold and heat, and SUMMER and WINTER...shall not cease. This proves that there were seasons in the days of Noah. Therefore, the earth was on its axis at that time. There is supposition that the earth was at some point, in early or pre-historical time on a zero degree, without an axis, thus eliminating the seasons. This idea is put forth as an explanation, for finding undigested tropical vegetation, in the stomachs of the [perfectly frozen in the perma-frost of Siberia] woolly mammoths. Genesis 8:22 and Genesis 1:14 ["for seasons"], are very strong indicators that the earth was on its axis since Adam was put on the earth. There cannot be an equinox without the earth being on an axis.

Exodus 34:22 gives us another very important point. The feast of ingathering [feast of Tabernacles] at the **'year's end**.' The Bible margin says **'turn of the year,'** [SC # 8622 is te-quphah, sometimes spelled tkufah and pronounced tek-oo-fah], and it means a revolution [of the sun], a course, circuit, a come about. We have already seen that the word year means a revolution of time, the course of the sun, the changes of the seasons and we now add the word 'tkufah' and **we get the turning points of the year, known as the seasons**. The four turning points of the year are the **spring equinox**, the **summer solstice**, the **autumn equinox**, and the **winter solstice**. The feast of Tabernacles, mentioned above is at the turn of the year. Which turn of the year? The **autumn equinox season of the year**.

Return to Exodus 12:1-2 once more for clarification. YAHWEH said, "This month [new moon] shall be unto you the beginning of months [new moons]: it shall be the first month [new moon] of the year [revolution of time, turn of the seasons, circuit of the sun] to you." What turn of what season? From WINTER to SPRING. That turn of the seasons is called the **SPRING EQUINOX** and you cannot have a first new moon of a new year until the old year or season ends. Hence, anyone who thinks or teaches otherwise [e.g. that it can be the closest new moon to the equinox, thereby sometimes coming before the equinox], is in error, and is considered "least in the Kingdom of heaven," see Matthew 5:19. This **'tittle'** of the law shall in no wise pass, see Matthew 5:18. We will discuss, in the paragraph found later in this booklet [entitled "Constantine's Influence on the Calendar"], where the idea came from that a new year could begin before the old year ended. Suffice it to say that it would be preposterous to be standing in Times Square in New York City, at one minute before midnight, on December 31, as the last minute countdown began, for the new year. And someone tries to tell you that the real new year began fourteen or fifteen days earlier. It is just as preposterous to say that the new year, of YAHWEH'S CALENDAR, can begin before the old year ends, which at its earliest is the Spring Equinox.

THE TKUFAH [TURNING OF THE SEASONS] IS A PINPRICK OF TIME.

Just how long is the turning of one season to another? How long does it take the Sun to cross the Equator? How long does the Sun linger over the Tropic of Capricorn before it begins its trek back toward the northern sky? How long does the Sun linger over the Tropic of Cancer before it starts back south again? The answer to these three questions is the same. The tkufah [turning of the seasons] is a pinprick of time. Just like the split second of time, at the countdown of December 31 to January 1, mentioned above, [which is imaginary, arbitrary and pagan], even

so the equinoxes and solstices [which are not imaginary, not arbitrary and not pagan] are a split second of time.

Let us consider the exact center of the sun, as it is perpendicular to the exact center of the earth. [This author is not an exact mathematician, so I will write in approximates and rounded numbers, so the sense of the text is not blurred by eight or ten places to the right of the decimal point. I leave the exact mathematics to those who do them well.] The earth is spinning, at the equator, at approximately twenty five thousand [25,000] miles per day. The earth is approximately twenty five thousand miles in circumference at the equator and it takes one day to make a revolution. That is one thousand forty two [1042] miles per hour, seventeen [17] miles per minute, one quarter plus [1/4+] miles per second. So in one second of time, the perpendicular point of the sun to the earth is already one quarter plus [1/4+] mile further west of where it crossed the equator.

The approximate distance between the tropics [Cancer and Capricorn] is thirty seven hundred [3700] miles, with each tropic being 23.5 degrees from the equator. This is the furthermost point, north or south, on the earth where the sun is perpendicular to the earth. These two points are determined because of the 23.5-degree axis of the earth. It takes one half year [182 5/8 days] for the sun to go from its furthermost north point to its furthermost south point, or vice versa. The sun's perpendicular point to the earth moves 204 miles north or south every day. That's 7/8th of a mile [4500 feet] per hour, 74 feet per minute and 2-inches per second. Again, in one second of time, the perpendicular point of the sun to the earth is approximately two inches north or south of the equator on the days of the equinoxes.

This split second or pinprick of time seems to be elongated [before and after] due to the shear mass of the sun which is approximately eight hundred and seventy five thousand miles in diameter [actually 865,400 miles and constantly growing smaller]. However, the perpendicular point of the sun is over the equator or the tropics for less than a second as it makes its circuit around the earth. More about this later when we discuss some other scriptures that relate to the calendar.

THE MYSTERIES OF THE PYRAMIDS ARE NOT SO MYSTERIOUS. HOW DID THE BUILDERS OF THE PYRAMIDS GET THEM TO FACE EXACTLY NORTH? NOT SO HARD, AS WE SHALL SEE.

One of the mysteries of the pyramids, that has baffled and puzzled the experts for centuries is how did the builders get the pyramids to face exactly north, and how could they construct a tiny [by comparison] shaft from the top of the pyramid down into the bowels of the pyramid? So that on a certain day of the year at a precise time [perhaps at noon] the sun would shine down that tiny shaft all the way into the lowest reaches of the pyramid, perhaps into the burial vault of the pharaoh himself. Not so hard to do with a few simple construction principles, and basic geometry 101.

ANY ORDINARY ISRAELITE BUILDING CONTRACTOR OF HIS DAY COULD HAVE LAID OUT THE PYRAMIDS FACING TRUE NORTH.

Those people who live in the colder climbs of the Northern Hemisphere know the most desirable direction to face a house is toward the south, with the biggest windows, to collect the warmest rays of the sun. Worldwide, the sun [perhaps sun and wind] is the biggest factor in determining which direction to face a building. Mostly it is done haphazardly, by approximation. However with a few simple [almost crude] tools, true north, south, east or west can be determined with total accuracy. This can be accomplished on any day of the year, as long as we have a morning sunrise and an evening sunset. We place a four feet perfectly straight stake [a dowel]

into the ground, making sure it is exactly plumb. We can whittle the stake to be straight and we can use a piece of string, rawhide or light rope with a rock tied to the bottom to act as a plumb bob. At exactly sunrise, we follow the shadow of the stake, from the southeast to the northwest, for fifty foot to foot steps [fifty feet]. We then place a very short four-inch stake in the ground, exactly on the shadow. This gives us a line, as we stretch a string, from the southeast to the northwest. We repeat the process at sunset, being careful to be on as close to an east west line with the four feet dowel and as close to a north south fine with the four inch stake, as is possible, With the four feet dowel in the ground and plumb, at exactly sunset it casts a shadow from the southwest to the northeast. We step off fifty foot to footsteps [fifty feet] and place another four-inch stake exactly on the shadow. We stretch a string again with the two strings creating an X.

If this were accomplished at or near the Winter solstice [for the Northern Hemisphere], we would have a wide-open X. If we did it near the equinox it would be a very closed X, at the east and west ends and very open at the north and south ends. And if we did it on the equinox we would create a straight line [instead of an open X] at sunrise followed by a straight line at sunset, and this could be used to prove our layout to be true east west.

We now have a stake in the ground at the northeast, the northwest, the southwest and the southeast corners of a rectangle, with two strings stretched from the corners creating an X. We will now stretch a string between the two eastern stakes, marking the string where it bisects with the north and the south stakes. We fold the string in half and by doubling the string back over itself, we find the halfway point of the string. The halfway point on the string is exactly one-half of the distance between the two eastern stakes. We place another four-inch stake in the ground at this halfway point. We repeat the process for the northern stakes, the western stakes and the southern stakes. We now have a four-inch stake at the exact halfway points of all four sides. Connecting the halfway point stakes from east to west, with a string, will give us an absolutely true east west line. And connecting the halfway point stakes from north to south, with a string, will give us an absolutely true north south line. If so desired, the process can be repeated the next sunny day, over the existing layout to prove the accuracy of the first layout or it can be done on one of the equinoxes for exact accuracy.

WHAT CAN WE DO WITH PERFECTLY TRUE NORTH SOUTH, EAST WEST LINES?

If we were building a pyramid, we could extend those lines out for as long as necessary to establish the base of the pyramid. There is a limit to stretching a string, because it needs to be suspended in the air, and the slightest wind will deflect it, if it is very long. To offset this problem, we can hollow out a very straight bamboo or papyrus reed, putting it on a fixture, so it stays precisely secure, and sighting through it, thereby extending the use of the straight string by many times over. Although the nomadic tribes had no use for precise instrumentation, those who built buildings and pyramids did, and they perfected their instruments to fill those needs. Zechariah 4:10 mentions the use of a plummet in the fifth century BC. How do we suppose Solomon's Temple was built? It was plumb, square, level and exactly measured, because the necessary tools were available at that time, and at the building of the pyramids, with exact, precise measurements evidenced everywhere.

Other uses for true east west and north south lines, would be for surveying, traveling, map making and reading, the meridian [longitude, north south] lines and the latitude [east west, the equator being latitude zero] lines around the earth, time zones, time keeping and observation, the study of and mapping of the stars and heavens and calendar recording and preparation.

No matter how simple [the sundial] or how complicated [a transoceanic flight or even a trip to the moon], it all starts with true east west and north south lines.

THE USE OF TRUE NORTH SOUTH AND EAST WEST LINES WERE VITAL IN CALENDAR RECORDING AND PREPARATION.

Using the above method of determining true north south and east west lines, we will now construct a simple but extremely accurate calendar. We will take an approximately thirty feet long timber [a squared off log] and we will support it on three or four flat smooth rocks so it doesn't lay on the dirt and rot too quickly. The timber will be laid on an exact north south line and secured by stakes driven into the ground, on both ends and on both sides, so we get absolutely no movement whatsoever. At the halfway point, on the length of the timber, and perpendicular to the timber, we will set a four feet long dowel exactly plumb into the ground. This dowel will be approximately ten feet away from the timber. If we set the dowel on the east side of the timber, we will be recording the sunrises. If we set the dowel on the west side of the timber we will be recording sunsets. Both sides offer different advantages. Sunrises usually have clearer skies; therefore, we have more days to record on our calendar. Sunsets are when the new moons appear and when YAHWEH starts and ends his day. At exactly sunrise or sunset or preferably both, we will put a mark on the timber where the shadow from the dowel is cast. We will do this every day and soon we will discover a series of marks on the timber that are very evenly spaced apart. Remember in the above chapter on the TKUFAH we found out that the sun moves north or south [depending on the time of the year] approximately twenty and a quarter [20 1/4] miles per day. This north or south progression of the sun, at sunrise or sunset, changes the angle of the sun every day, thereby slightly changing [an inch more or less] the shadow cast by the dowel, across the timber. Hence, we have a series of evenly spaced marks on the timber. With no mark on a cloudy day or days, you simply measure, using the distance of the other uniform marks to fill in the spaces. It doesn't matter what time of the year you start recording your marks. Nor does it matter where on the earth you are located. You will begin to team things that you probably never knew before [remember this when we get to the chapter that describes Psalm 19].

After recording the marks for at least thirty days, we will have had at least one new moon. Record it on the appropriate mark on the timber, and thereafter on each and every new moon. Remember Exodus 12:2 we are looking for a specific new moon on which to be begin the new year and from which to count Passover, and another [the seventh] new moon on which to blow trumpets and count to the day of Atonement and the Feast of Tabernacles. Ezekiel 46:1-3 also says we are to open the gate of the inner court [of the temple] for worship "on the Sabbath...and in the day of the new moon." We need also to record, not just every seventh day, but the specific seventh day called the Sabbath. In one thirty day period we can now begin to roughly at first, later to refine it, predict future Sabbaths and New Moons. We need also to record marriages, births, deaths and any other pertinent happenings such as storms, rain and snow amounts, temperature extremes, invasions, visits, returning of birds, animals awakening from hibernation, the budding of the trees, first and last frost, crop planting and harvesting, size of harvest, etc. A calendar begins to turn us into a "civil" society.

Let us assume for the sake of example that we began to record our marks on the timber in the middle of the fall season [Just before the snows begin for those of us in the Northern Hemisphere]. The sun is shining from near to its most southern point, therefore the marks on our timber are on the northern end and moving further north [as they move along inch by inch]

day after day. Then one day we realize that the marks reverse direction and begin to move south on the timber. So as not to confuse the marks since the change of direction, as they overlay the first marks, we will use a different color. The marks moving north on the timber will be black and the marks moving south on the timber will be red. With the change of direction [on the exact day the sun is over the tropic of Capricorn], we have observed a **TKUFAH, A TURN OF THE YEAR, THE WINTER SOLSTICE.** No need to make note of it seeing as it's the northern most mark on our timber.

Two to three more new moons go by as it begins to warm up, and we can determine by our marks on the timber when the next tkufah occurs. If we were using the two-dowel system to record both sunrise and sunset, then we could tell when the spring equinox occurred. The sunrise and the sunset shadows would cast directly over each other, from dowel to dowel, putting the two marks on the timber at the same spot, and creating a straight line from dowel to timber to dowel. The red marks will continue to progress toward the south end of the timber and on the next tkufah will have changed direction again. We will begin using black marks at this time, as the marks begin again to move north on the timber. We are in the heat of the summer, in the Northern Hemisphere. We will now count all our red marks on the timber to determine the center mark [this will verify our autumn equinox mark], and we will mark the center mark as the **TKUFAH, A TURN OF THE YEAR, THE SPRING AND AUTUMN EQUINOXES**. Next, we will find the mark on the timber, for the new moon on or after the spring equinox and we shall mark it, the beginning of the year. We shall then count to the fourteenth mark after the first new moon mark, after the spring equinox and mark it **PASSOVER**, the fifteenth mark we shall mark the FIRST DAY OF UNLEAVENED BREAD and so forth. In counting the red marks, from the winter solstice to the summer solstice we discover there are one hundred and eighty two [182] or one hundred and eighty three [183] marks. The variation comes because there are three hundred and sixty five and a quarter [365 1/4] days in the full year [the revolution of time]. A half-year [one-half of a revolution of time] is one hundred and eighty two and five eighths [182 5/8] of a day.

We have by now recorded nine or ten new moons on our timber, and we have noticed that the new moons vary in several ways. They vary in angle above the horizon from low [10+- degrees] to high [30+- degrees or more]. They vary in size, from a razor thin barely visible, curved, sliver to a much bigger, wider, curved, brighter chodesh [new moon]. And they vary as to location in the Western sky, due west at the equinoxes, west by north west at the summer solstice and west by south west at the winter solstice. It appears that the moon stays on the same plane as the sun when compared to the earth, and the earth varies due to its axis. The new moons also vary in the length of time, between new moons. Some new moons are 29 days apart and some are 30 days apart. The cause for this is that the actual time between new moons is twenty-nine days and thirteen and a half-hours [plus or minus] apart. The rule of thumb to follow is that if the new moon is not observed on the twenty-ninth day (just after sunset the night before] then it has to be there on the thirtieth day. The cloudy night syndrome [meaning if you can't see it, then it didn't happen] does not apply on the thirtieth day. **There is never thirty-one days between new moons**. In today's high tech world the new moons can be calculated to a second of time and therefore can be predicted, any numbers of years in advance, with perfect accuracy. Also, with today's almost instant communications, we can verify the new moon's sighting anywhere in the world. However, our scenario is, thirty-five hundred years ago and we are using dowels, shadows, timbers and marks to make a calendar.

All phases of YAHWEH'S CALENDAR are self-correcting. Even if we made a mistake,

as to a new moon sighting, the very next month will begin accurately with the next new moon sighting. Leap years added days and calendar corrections are not necessary, we simply wait for the next spring equinox, followed by the first new moon and begin a new year. Twelve new moons add up to 354 plus days, while the actual revolution of the earth around the sun is 365 plus days, leaving us with an extra eleven days every year. Every three years, thereabouts, the extra days produce a thirteenth month. Remember what we are learning and it will make Psalm 19 much easier to understand, when we explore its meaning.

For the best results, we need to roll the timber to the next, new side, every year, on the anniversary date. Remove the stakes on one side of the timber only, being extremely careful not to disturb the stakes on the ends and the other side of the timber. Do this every year and you have a four-year history. Store the old timber and replace it with a new timber. Use a six-sided timber and get a six-year history, etc.

WHAT IS THE CONJUNCTION, AND HOW DOES IT FIT INTO THE CALENDAR PICTURE?

The conjunction occurs every twenty-nine days and thirteen and one half [plus or minus] hours. The conjunction is the exact point at which the moon crosses the straight line between the earth and the sun. The word **conjunction** nor any reference to it or to observing it, in any form or fashion, **is not in the Bible**. Whereas the word **chodesh**, which means **new moon** [as observed by the eye] is mentioned more than two hundred and fifty times in the Bible. The shear weight of mentioning the new moon, 250 plus times is reason enough to prove that it is what we should be observing, not the conjunction.

The new moon cannot be seen until the second or third night [sometimes, but rarely the fourth night] after the conjunction. If the conjunction [which cannot be seen] occurs at the beginning of day one then the new moon can be seen the second night. If the conjunction occurs at the end of day one [nearly 24 hours later] then the new moon will be seen on the third or rarely on the fourth night. The new moon will not be seen until it is at least ten degrees away from the conjunction line. It will not be seen at nine and a half degrees or nine and three-quarter degrees. Either there will not be enough of the moon exposed to us or it will be below the horizon, so that it cannot be seen with the naked eye.

We are on a fixed or exact place on the earth and as the earth is spinning away from the sun [at even], thus making us have a sunset, if the moon is at the conjunction, then we are more than ninety degrees away from the conjunction line. The moon is too far around the circle of the earth for us to see it. On the second or third night after the conjunction, when the moon is at ten or more degrees away from the conjunction line, we can from our fixed point on earth look back toward the already set sun [about a half hour after sunset] and see the new moon, as it moves away from the hidden side [at the conjunction] of the earth.

Remember, in Genesis 1:14-16, **YAHWEH put the lights in the sky, as evidence** of the days, seasons and years; and Exodus 12:2 the months [new moons] and the beginning of the year. The words light or lights in Genesis 1:14-16 come from two Hebrew words SC #s 3974 and 216 they mean a luminous body, light, brightness, illumination or luminary. There is no word whatsoever that even hints at darkness nor is there any hint at observing anything in its dark state. To use the conjunction to try to determine the beginning of the month is a fabrication and a twisting [wresting of the scriptures, 11 Peter 3:16] of the clear light of the truth of YAHWEH ELOHIM.

THE SPINNING OF THE EARTH, THE REVOLVING OF THE EARTH AROUND THE SUN AND THE AXIS OF THE EARTH ALL ACT TOGETHER TO

CREATE A PATTERN, THAT IS BIBLICALLY REVEALED.

The earth is spinning [at the equator] at twenty-five thousand miles per day, that's one thousand and forty-two miles per hour. The earth is lying on its side by twenty-three and a half degrees. That axis is always pointed in the same direction, so that at the spring equinox one side of the axis is directly pointed at the sun. One quarter of a revolution around the sun [ninety-one to ninety-two days later], the northern part of the sphere, at the summer solstice when the sun is directly over the tropic of Cancer, is pointed directly at the sun. One quarter of a revolution later, the other side of the axis, at the autumn equinox, is pointed directly at the sun. Then one quarter of a revolution later, when the southern part of the sphere is pointed at the sun, this is the winter solstice, when the sun is directly over the tropic of Capricorn. When we add together the spinning, the axis and the revolving around the sun, we get a unique pattern that is Biblical revealed.

Let us, for the purpose of this example, begin at the tropic of Capricorn at the winter solstice. One day later, the sun has moved approximately twenty and a quarter [20 1/4]miles north, and so on each day thereafter. As the earth is spinning, the sun is therefore making a circuitous line around the earth, like the threads around a screw. This circuitous line or threading or screwing continues day after day, being twenty and a quarter miles further north than it was the day before. Ninety-one or ninety-two days later it crosses the equator and ninety-one or ninety-two days later it is over the tropic of Cancer on the Summer solstice. It has now been one hundred and eighty-two and five-eighths [182 5/8] days since it left the tropic of Capricorn. Once over the tropic of Cancer, it reverses its northern direction and begins to go in a southern direction, progressing at twenty and one-quarter miles per day. In ninety-one to ninety-two days, it again crosses the equator, and in one hundred and eighty-two and five-eighths days since it left the tropic of Cancer it again is over the tropic of Capricorn. It has taken three hundred and sixty-five and a quarter [365 1/4] days to complete the entire cycle. This is called a year, a revolution of time, and the course of the sun and the change of the seasons.

Remember the circuitous line or threading or screwing that went around the earth, well it continued north across the equator until it came to the tropic of Cancer and then started its trek south, back across the equator to the tropic of Capricorn again. Being approximately twenty and a quarter [20 1/4] miles apart, day after day, and being twenty-five thousand miles long [at the equator] day after day, that line created a series of extremely long diamond shapes over the earth, between the tropics.

Remember when we made our calendar on the timber. We now see what it was that caused us to get the variation of marks up and down the timber.

NOW FOR THOSE MYSTERIOUS SCRIPTURES WE HAVE BEEN ALLUDING TO.

Ecclesiastes 1:4-6 is our first scripture. Paraphrased it says one generation after another comes and goes, but the earth is always here. The subject in verses five and six is the earth and how the sun impacts it. Verse five paraphrased says the sun rises and sets and goes around the back of the earth where it rises again. That is called a day. In verse six we need to place the words wind and sun in the word order of the Hebrew text. Verse six continues the description about the sun as it impacts or creates the wind. The sun goeth toward the south, and turneth about unto the north. Shlomo Stemberg translates this as "it [the sun] walks to the south and returns to the north." The Septuagint translates verses five and six as "And the sun arises, and the sun goes down and draws toward its place; arising there it proceeds southward, and goes round toward the north. The wind goes round and round, and the wind returns to its circuits." And

here is yet another possibility of verse six that is based upon the weather patterns that we see around the earth. 'The sun goes toward the south and turns about unto the north; it [the sun] whirls [spins] about continually, and the wind returns again according to his [the suns] circuits.'

The Farmers Almanac predicts the weather, based upon history, and is 75% accurate as to the approximate date and severity of storms. Weather history shows us that spring rains, summer drought, hurricane season, monsoons, El Nino and la Nino winds and weather patterns, autumn rains, winter storms and early spring storms all fall into historical patterns, based upon the sun's circuit. 'The wind [storms] return again according to his [the sun's] circuits,' is certainly accurate according to weather history.

Back to Shlomo Sternberg's translation of the sun walking toward the south and back toward the north. The marks that we put on our timber calendar [see pages 7 & 81 actually show the sun as it walks, day after day, to the south and returns to the north.

NEXT, WE GO TO PSALM 19.

If you were a member of the Worldwide Church of GOD, then you probably sang Psalm 19 out of their purple Bible Hymnal, and never fully realized what you were singing. On page 16, of that hymnal, the song entitled "The Heavens GOD'S Glory Do Declare," was a catchy hymn, as you struggled to match the words with the notes. I thought I got the jest of what it was telling me but little did I realize I was actually singing about the makings of the calendar of YAHWEH.

Psalm 19:1-6 tells us in mostly figurative language what we have learned in the preceding pages of this booklet, and of the pages of the booklets and research of the three men mentioned on page one of this booklet. Verse one "The heavens declare the glory of YAHWEH; and the firmament shows his handywork." SC #7549 for firmament is 'the visible arch of the sky.' Webster's Dictionary says 'the whole vault of the sky with its myriad stars etc.' I will not attempt to go into all the ways the heavens and firmament declare YAHWEH'S glory, however the sun and the moon as they relate to the earth, are a marvel as they glorify the CREATOR YAHWEH, in the establishment of the calendar. It truly declares his handywork, his creation.

Verses 2 & 3 say, paraphrased, day after day utters speech, and night after night knowledge is learned. Verse 3 says, but there is no speech or language, and you don't hear a voice. Remember our statement on page seven 'that you will begin to learn things you probably never knew before.' Day after day as you put the marks on the timber calendar, recorded the tkufahs, and night after night, as we recorded the new moons, we learned things and yet never heard a word.

Verse 4 says 'Their line is gone out through all the earth.' The sun and the moon like it, leave a circuitous line around the earth [see page 101. 'The words [understanding] of this, goes to the ends of the world [to the tropics of Capricorn and Cancer]. In them [within the tropics of Capricorn and Cancer] hath he [YAHWEH] set a tabernacle for the sun.'

Verse 5 says the sun is like a bridegroom coming out of his chamber. YAHSHUA is the bridegroom [Revelation 19:7-9] and it is he that shines as the sun in his strength [Revelation 1:16]. This identifies YAHSHUA as the creator and maker of this His calendar. Is not He in the midst of all His holy days and holy things. There is rejoicing as we see the sun, as a strong man [in its strength] to run a race [as it races across the daylight sky]. We rejoice in the sun's warm rays, especially on a cold winter day. People move to sun-country to escape the dreariness of cold, rainy, overcast days. This author moved to Colorado in the seventies, because it boasted of 73% sunshine. We left cold Wisconsin, where the year before we left, there was 23% sunshine. Warm sunny days add cheerfulness to people's lives.

Verse 6 says his [the sun] going forth [source] is from the end of the heaven. And his circuit [circuitous line around the earth] unto the ends of it [the earth]. The circuitous line of the sun goes from one end of the earth to the other, from the tropic of Capricorn to the tropic of Cancer, from one tkufah to another. 'And there is nothing hid from the heat thereof' Remember the circuitous line that threads around the earth every twenty and a quarter miles apart, every half year as it goes from south to north and then back again. The sun will literally find every square foot on the earth between the tropics, and beyond them.

THESE TWO SCRIPTURES, ECCLESIASTES 1:4-6 AND PSALM 19:1-6, SPELL OUT IN SOMEWHAT FIGURATIVE LANGUAGE THE WORKINGS OF THE CALENDAR OF YAHWEH. AND WEBSTER'S DICTIONARY CONFIRMS IT.

Webster's Dictionary definition of a **calendar** is as follows: 1. A table of the days, weeks, and months of the year... 2. A system of fixing the length and divisions of a year... 3. The natural units of our [the] calendar are **the day** [one rotation of the earth on its axis] and **the year** [one revolution of the earth around the sun]... In ancient times [and in today's world also] **the month** was equated with a natural division of time... [the revolution of the moon around the earth]. This is exactly the same information that the Bible reveals in Genesis 1:14-16, Exodus 12:1-2 and Exodus 34:22. The day, the year, the new moon and the tkufah [the four seasons, representing the earth on its axis, the four turns of the year]. And Ecclesiastes 1:4-6 and Psalm 19:1-6 shows how it works.

WHAT CALENDAR DID YAHSHUA MESSIAH USE WHEN HE WAS ON THE EARTH?

The calendar that YAHSHUA MESSIAH used, when he was on the earth, can easily be determined by looking at the date that he died. YAHSHUA MESSIAH fulfilled the Passover as I Corinthians 5:7 clearly states, "...MESSIAH our PASSOVER is sacrificed for us." So YAHSHUA MESSIAH died on the fourteenth day, after the first new moon, after the spring [vernal] equinox [see Exodus 12:1-6 how to count to the Passover]. That day is also known as the fourteenth of Abib [Aviv] 31 AD. In the Gregorian calendar, which is used in most of the world of today, the day that YAHSHUA MESSIAH died, was Wednesday, April 25, 31 AD. If we add fifteen days [half the time between the new moons] and fourteen days [the time from the new moon to the Passover] we come up with twenty-nine [29] days. The spring [vernal] equinox is on March 21 or 22. Add twenty-nine days to March 22 and you come up with April 20. April 25 is five [5] days longer than April 20. This simple calculation proves that the farthermost new moon from the spring [vernal] equinox [the new moon that followed the spring equinox] was the new moon that determined the beginning of the year, the year that YAHSHUA MESSIAH died.

YAHSHUA MESSIAH REFUTES AND PROVES AS BOGUS, THE HEBREW CALCULATED CALENDAR THIS CALENDAR WAS DEVELOPED BY HILLEL II IN APPROXIMATELY 357 AD [326 YEARS AFTER THE DEATH OF YAHSHUA MESSIAH], AND IS WIDELY USED IN THE JEWISH WORLD OF TODAY. THE FAULT-FILLED HEBREW CALCULATED CALENDAR IS USED BY MOST OF THE HOLY DAY KEEPING CHURCHES OF GOD AND IT PLACES THE FESTIVALS OF YAHWEH (MOST OF THE TIME] ON UNHOLY DAYS OF THE YEAR

From his grave [so to speak] and from his exalted place at the right hand of YAHWEH HIS [OUR] FATHER, YAHSHUA MESSIAH pleads for an unpolluted and **unprofaned table**. Is it possible, after all these years of finger pointing that Isaiah 1:13-14, Amos 5:21 and Malachi 1:12 could in some small way [it's not a little thing to ignore the truths of the ETERNAL YAH-

WEH ELOHIM, **apply to the CHURCHES OF GOD** that keep the Holy Days. These are not the times of ignorance, and how long [as long as it takes his people to learn] will YAHWEH continue to wink, as Acts 17:30 commands us to change when we are proven to be wrong. There is abundant proof that the Hebrew Calculated Calendar is a corrupt calendar and that it is absolutely not the calendar revealed in the Bible. Contact the three men listed on page one of this booklet [addresses on the last page] for their literature, they offer multitudinous, infallible proofs, and you do a prayerful, in-depth study by the SPIRIT OF TRUTH [John 16:13]. Learn about this vital truth, the **true calendar of YAHWEH**.

AS WAS MENTIONED ON PAGE FOUR, WHAT INFLUENCE DID CONSTANTINE HAVE ON THE CALENDAR OF YAHWEH? REMEMBER IN DANIEL SEVEN [7] THE LITTLE HORN WHO [VERSE 25] SHALL SPEAK GREAT WORDS AGAINST THE MOST HIGH, AND SHALL THINK TO CHANGE TIMES] THE CALENDAR] AND LAWS.

The first century AD was a century of infamy and reconciliation. YAHSHUA MESSIAH'S own people would call for his death and the evil Roman Empire [the fourth horn of Daniel seven] would carry it out. But through it all the sins of the whole world would be atoned for. The fourth century AD was probably the darkest, most corrupt century of all, for in it was sounded the death knell of YAHWEH'S true way of life. In 306 AD Constantine, emperor of the Roman Empire would take power. And in 313 AD, Constantine would declare "Christianity" [what we know as Roman Catholicism today, and it didn't happen all at once] as the official State religion. In world history, I was taught that Constantine was the great champion of "Christianity." However, the truth be known, he very effectively, almost destroyed, YAHWEH'S TRUE WAY OF LIFE. He was successful in expunging YAHWEH'S TRUE WAY OF LIFE, out of the "Christianity" of his day, until what we have today is a counterfeit. The most significant thing, to the ekklesia [the called out, true body of believers], was the Council of Nicaea, which Constantine called into forum in 325 AD. Three of the most significant pronouncements by the council were: 1. The orthodox doctrine of the trinity, setting aside the truth about the Family of YAHWEH, 2. Sunday as the day of worship, setting aside the true seventh day Sabbath and 3. The celebrating of good Friday/Easter Sunday, setting aside the true Passover. Although Constantine did not die until 337 AD, the Council of Nicaea's pronouncements led to the severe persecution of true believers from 337 to 361 AD, and the true assembly went underground. The true Assembly of YAHWEH fled into the wilderness [underground, out sight, out of the historical records] as Daniel 7:25 and Revelation 12:6 show. For the next two centuries, up until the middle of the sixth century [under Justinian], the true assembly had little or no voice within the Roman Empire, with the true assembly falling just about out of sight for a thousand, two hundred and sixty years, known as the **DARK AGES.**

WITH EASTER/RESURRECTION DIVERTING THE EMPHASIS AWAY FROM THE PASSOVER/DEATH OF MESSIAH, IT LEFT THE TRUE BELIEVERS VULNERABLE, AND EASILY IDENTIFIED AS HERETICAL TO THE OFFICIAL ROMAN STATE RELIGION.

At least <u>two or three times</u> during the ten to twelve years, from 325 AD to 337 AD, when the severe persecution began against the true believers, the Passover/death of MESSIAH would fall out of sync with Easter/resurrection. Easter [Eostre, Creek goddess of the dawn and Aurora, Roman goddess of the dawn, were celebrated at the spring equinox]. Turn to Ezekiel 8:15-16 and see this very same event, being committed right in front of the temple of YAHWEH. YAHWEH calls this a great abomination, as it occurs in Israel and Judah. Easter is reck-

oned as being the first Sunday, after the first full moon that coincides with or comes after the spring equinox. Passover, according to Bible reckoning is on the fourteenth day after the **first new moon** that coincides with or comes after the spring equinox. The **first full moon** and the **first new moon** are not one and the same, and depending on how they fall, can cause Easter and Passover to be as much as forty-three [43] days apart, from year to year, and as much as thirty [30] days apart in any one given year.

LET'S LOOK AT A VERY POSSIBLE EXAMPLE TO SHOW HOW EASTER AND THE PASSOVER CAN BE SEPARATED BY AS MUCH AS FORTY-THREE DAYS, WITH THE PASSOVER/DEATH OF MESSIAH COMING ALMOST A MONTH AND A HALF AFTER EASTER/RESURRECTION OF MESSIAH.

The embarrassing question for Constantine and the Council of Nicaea was how could Messiah be resurrected before he died? With the true believers, which were using YAHWEH'S CALENDAR out of the Bible, already being the fall guy; it was easy to persecute them into submission or out of the empire. This, along with the other doctrinal differences, brought about by Constantine and the Council of Nicaea, were the reasons for the 337 to 361 AD, persecution of the true believers. Let us now look at the very possible example of Easter/Passover being out of sync.

First of all we need one point of understanding. The **full moon is not exact**, like the new moon is. The moon is in an elliptical orbit around the earth, and that ellipse changes [shifts from one side of the earth's axis to the other and back] throughout the year, so that the full moon can [rarely but does occur] be on the thirteenth day, and more often on the fourteenth, fifteenth or sixteenth day [remember the moon completes an orbit every twenty-nine days and approximately thirteen and a half hours].

The earliest Easter can fall is March 22, that would be if the full moon was on the equinox [March 21] and the next day was a Sunday, it would be Easter. The latest Easter could fall would be April 26, that would be if the full moon were on the day before [March 20] the equinox [March 21], then add thirty days to the next full moon, plus seven days to the next Sunday, which would be Easter Sunday.

The earliest Passover can occur is April 4, that would be if the new moon were after the equinox [March 21] then count fourteen days to Passover. The latest Passover can occur is May 3, that would be if the new moon were on the day before [March 20] the equinox [March 21], then add thirty [the longest time possible] days to the next new moon, plus fourteen days to Passover.

If we take the earliest Easter can occur [March 22] and the latest the Passover can occur [May 3] we get a forty-three [43] day further-most difference. In a ten to twelve year span [325 to 337 AD] we could easily get a twenty to thirty to forty-three day difference, two or three times. In most years, it would be much closer, very close or possibly but rarely, even be in sync.

THE SOLUTION TO THIS DILEMMA THAT CONSTANTINE AND THE COUNCIL OF NICAEA IMPLEMENTED WAS TO PERSECUTE THE TRUE BELIEVERS INTO SUBMISSION OR OUT OF THE EMPIRE, AND TO GO TO THE TALMUDIC JEWS WHO THEY TOLERATED TO A GREATER DEGREE, BECAUSE THEY WERE NOT A THREAT SEEING AS THEY REJECTED YAHSHUA MESSIAH.

The result of this action was the corrupt, Talmudic, Hebrew Calculated Calendar, also known as the Hillel II Calendar, put forth in approximately 357 AD. Hillel [the hypocrite] simply changed the clear understanding of the scriptures, that of 'the first new moon after the spring

[vernal] equinox.' as YAHWEH said, to **the closest new moon to the spring equinox**. [See page four above, for the explanation of why it's the first new moon, after the spring equinox, not the closest new moon.] This ungodly change made it so that the earliest, the pseudo Passover could occur was on March 21, because the new moon closest to the spring equinox could occur as early as March 7, then add 14 days to come to the pseudo Passover. With Hillel [the hypocrite's] change, the latest the pseudo Passover could occur would be April 19, this would be adding fifteen [at the most] days from the spring equinox to the closest new moon after the spring equinox, then fourteen more days to the pseudo Passover. This one change put the pseudo Passover closer to and more often, somewhat in sync with Easter. And once the Talmudic Jews agreed with the changes, and implemented their corrupt calendar, the persecution eased off and stopped in 361 AD.

Even one of their own, Josephus the Jewish historian refuted their actions, even though he was born just six years [37 AD] after YAHSHUA MESSIAH died. Josephus, in his book entitled "Antiquities of the Jews," Book III, chapter 10, p5 we quote, "In the month...called Nisan [Aviv]...is the beginning of our year...**when the sun is in ARIES**..." **Aries** is the first star formation seen, after **[never before]** the spring equinox, and is considered the most important reference point in the sky. The positions of all heavenly bodies are measured from this point. The term Aries is sometimes applied to the spring equinox. This historical record proves that the Jews just after YAHSHUA was on the earth were still using the YAHWEH inspired, BIBLICALLY revealed CALENDAR. They were not using the Hillel II, Hebrew Calculated Calendar of 357 AD.

ONE MAJOR BLUNDER BY HILLEL II AND THE TALMUDIC JEWS IS, BY CHANGING TO THE CLOSEST NEW MOON TO THE SPRING EQUINOX, THEY THREW OUT OF SYNC, THE AVIV [RIPE EARS]. WHAT DOES THE RIPE BARLEY OR AVIV PROVE?

In Leviticus 23:10-16 YAHWEH calls for a wave sheaf offering during the days of Unleavened Bread of Aviv barley. When the earliest possible Passover [April 4], is observed, by YAHWEH'S BIBLICAL understanding, the Barley is just barely ripe. A diligent search is made in and around Jerusalem just to find enough aviv [ripe] barley for this offering. The barley ripens over the next six weeks or so, making it plentiful, when the Passover is later.

When the **pseudo passover** is observed earlier, there is not any natural ripe barley to be found for this wave sheaf offering. The purpose of the AVIV BARLEY is to mark and clearly determine, with corroborative evidence, when the true Passover is to be observed. YAHWEH never leaves his word or believers without a witness, to those who have eyes to see or ears to hear.

THE TRUTH OF YAHWEH IS PUSHED ASIDE AND THE SAINTS ARE WORN OUT.

Constantine, the Council of Nicaea, and the Talmudic Jews under Hillel II, allied themselves together in a totally unholy alliance. As they performed their manipulations, the TRUTH OF YAHWEH was pushed aside [man can't change YAHWEH'S TRUTH] and man's lies were accepted by this false "Christianity." As Daniel 7:20 & 25 says, this little horn...who said great [meaning big pronouncements] things...thought to change times and laws...and in doing so...did wear out the saints of the MOST HIGH.

THE CORRUPT, TALMUDIC, HEBREW CALCULATED CALENDAR IS FULL OF ERRORS, WHICH ENTERED IN, WITH THE PASSING OF TIME.

The postponement rules, the nineteen year cycles, full and defective months, intercalated

years, the molad of Tishri being the start of the year, starting the month from the conjunction [molad], and the Babylonian names of the months are all corruption's to the truth of YAHWEH and the CALENDAR YAHWEH REVEALS IN THE BIBLE. Please contact the three men mentioned in this booklet for their corroborative, conclusive evidence against the corrupt calendar of Hillel II. The ekklesia, true believers, called-out ones cannot remain ignorant of this vital truth.

This author will make one quotation, which really says it all, from "SANCTIFICATION OF THE NEW MOON" by Rabbi Maimonides. In his introduction, he says in speaking about the Karaite Jews [long recognized as the only sect of the Jews who remain totally true to the Holy Scriptures]. **"Rejecting the fixed calendar [Hebrew Calculated Calendar of Hillel II and the subsequent additional errors] as a HERETIC INNOVATION. the Karaite held that by the law of Scripture the beginning of the months MUST BE DETERMINED BY THE APPEARANCE OF THE NEW CRESCENT AND NO OTHER MEANS, and that this had been the practice of ancient Israel at all times." AMEN AND AMEN** and the words of Revelation 22:18-19 ring out loud and clear about the adding to or taking away from the words of this book [the BIBLE]. He that has ears to hear, let him hear.

A VERY INTERESTING ADMISSION COMES FROM THE MOUTHS OF TODAY'S ORTHODOX JEWISH RABBIS, AS TAKEN FROM THEIR JERUSALEM WEB PAGE, DURING THE YEAR OF 1998.

When the orthodox Jewish rabbis were questioned, as to what action they would take, concerning the calendar, if and when a temple would again be built. Their reply was, 'we would go back to the Calendar, determined by the Crescent New Moon, that is revealed in the HOLY SCRIPTURES." That we could not consider entering the HOLY OF HOLIES, on Yom Kippur [Day of Atonement], accept it be on the exact right day.' Leviticus 16:1-2 YAHWEH said to Moses to tell Aaron the High Priest, not to come into the HOLY OF HOLIES [the HOLIEST PLACE OF ALL] whenever he wanted to, but only on the Day of Atonement, that he die not. This admission by the orthodox Jewish rabbis is another proof that the Hebrew Calculated Calendar, that they follow, is in error. They won't risk their lives on it. Why should the Holy Day keepers risk their spiritual lives, their eternal lives, on something so full of errors? May YAHWEH give you eyes to see.

This booklet is authored by David R. Kenders. September 2001. If you have any comments or questions please contact us at:

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