



Calendar Booklet

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PART 2

QUESTIONS & ANSWERS

Since the first publication of this booklet in 1979, Stewarton Bible School (SBS) has received many queries about the sacred calendar. In **Part Two** some of the most frequently asked questions are answered. The **Appendices** contain information as to how the sacred calendar is set up. New moon times and the beginnings of months are given at Appendix A. They should be carefully preserved, because they will keep you informed as to the appointed festival days and seasons when in some future year **SIGNS in the sun, moon and stars** are scheduled to occur. Stewarton Bible School does not - indeed it cannot - predict the date of Jesus Christ's return. No one knows that date except our heavenly Father (Matt.24:36). What we do say, however, is that when those celestial signs are seen by all the world on a sacred season, day or year, then a vitally important phase of human history will have begun and you need to be aware of that fact. SBS offers this work to the reader with much prayer, trusting that he/she will greatly benefit as a result of its study. Now to those questions and answers.

QUESTION 1

When does a month begin in the Sacred Calendar? Does it begin on the day of the astronomical new moon (conjunction), or when the new moon is first sighted with the naked eye?

Answer

A month in the sacred calendar begins with a first sighting of the new moon. An '*astronomical new moon*' (**conjunction**) occurs when the sun and moon are in a straight line with the centre of the earth. The new moon is not visible to the naked eye at this time; but becomes visible between about 15 and 48 (or more) hours later. In ancient days months began when the new moon was first seen with the **naked eye**. The ancients literally '*looked out*' for the new moon and when it was seen they pronounced the start of the new month. They didn't publish the calendar several months or years in advance as we do today; but started each month when they actually saw the new moon. That is the original and best way to determine the beginning of a month. It completely eliminates the one day discrepancies that even the most conscientiously produced pre-printed calendars are liable to contain.

When, however, astronomers began to calculate the circuit of the moon around the earth, conjunction times became available and calendars based on these times began to be produced, months or even years in advance. The question is: *What should we do, now that conjunction times and phases of the moon charts have become available?* Do we use computer produced calculations and print a calendar in advance or not? Our answer is as follows. Some Christian groups - including SBS - publish calendars in

advance by using mathematical calculations of some sort. However, because the ancient method was to **lookout for the new moon each month**, we in SBS use computer calculations **but also allow a certain period of time for the new moon to become visible, before determining the start of each month**. This means that after we have made an allowance for a **first sighting** with the naked eye, the pre-printed calendar SBS publishes is very much in line with the sacred calendar used in ancient Israel. In 1978 we asked a group of believers in Jerusalem to confirm our findings by actually checking the calendar SBS published against first sightings of the new crescent moon. After looking out for the new moon for several months **Elder Charles Dugger** of the Jerusalem Church of God wrote this:

"We find that the moon really is new over Jerusalem each month by your calendar and is off as much as two days by the Jewish calendar. Therefore we wish to publish the truth - and we simply need a list of the moonrise after conjunction at Jerusalem. Brother Loughran just list them so that we can take the list straight to the printers."

First Visibility

The next question is: *How long after a conjunction does the new born crescent become visible?* The answer is: **It is not possible to infallibly predict the exact date and time of the first sighting of a new moon**. Various factors such as *atmospheric pressure, temperature, humidity along the light path, altitude, latitude/longitude, fog, cloud/dust cover, glare* etc. can all affect a first sighting. That is the reason why in the calendar and festival charts SBS publishes we use the words: **"a likely first sighting should occur,"** because no one can infallibly predict the moment when the new moon will become visible to the naked eye. The general consensus of authoritative opinion is that a first sighting of the new moon could occur any time between about **15 and 48 hours** after a conjunction. I quote two world famous authorities on this matter:

ROYAL GREENWICH OBSERVATORY (UK)

"It is not possible to predict accurately the dates on which the new crescent Moon will first be seen each month since there is no collection of reliable, fully documented, observations that can be used to establish the conditions that must normally be satisfied at the time of first visibility."

The simplest basis for prediction is that the Moon should be more than a certain age (measured from the time of astronomical new moon) at the time of sunset at the place concerned. It is, however, better to use the true elongation (the angular separation) of the Moon from the sun at this time, rather than the age. The new crescent is not normally visible until the Sun is below the horizon and so it is desirable to take into account the altitude of the Moon during twilight. The chances of seeing the new crescent depend slightly on the distance of the Moon from the earth, being greatest when the Moon is closest (i.e. at perigee). The local conditions, especially the height of the observer above sea level and the character of the surrounding surface, are important, and even when the sky is free from cloud there can be considerable variations in clarity of the atmosphere from day to day. The visual acuity of the observer is also significant.

It must be realised too that there are considerable variations in the astronomical conditions with both longitude and latitude on the earth so that even if the weather conditions were good everywhere, the dates of the first sightings would differ from place to place. Predictions can, therefore, only be valid, for restricted areas.

*Under ordinary conditions, the first sighting will not occur until the age of the Moon exceeds about **30 hours**, but a few reliable reports are known of sightings, under very good conditions, when the age has*

been only **20 hours or even less**. It is unlikely that the new crescent will be visible unless the elongation exceeds 10 degrees and the Moon exceeds 5 degrees when the Sun is 3 degrees. **It is interesting to note that the new moon can always be seen 30 days after the previous one and in half the cases it can be seen 29 days after, because the length of the synodic month is 29.53 days...** Since it is clear that any prediction of the date of first visibility must be uncertain, it is necessary to decide whether to prefer an early prediction that could not be substantiated by direct observation if conditions prove to be good, or a late prediction that could be vitiated by an observer on the previous day.

The simple rule that this Office recommends is that the age of the Moon should be **30 hours** at the time of sunset at the place concerned, but this rule is not so reliable in middle and high latitudes."

US NAVAL OBSERVATORY

"Under optimal conditions the crescent moon can be sighted somewhat less than **15 hours** after astronomical New Moon. Usually, however, it is not seen until it is more than **24 hours** old. Often it is not seen for more than **48 hours**... But despite these advances we still cannot predict the exact time or geographical location at which the young crescent will first be spotted."

You will see from these two quotations that the shortest time lapse for a possible first sighting is '**somewhat less than 15 hours**,' and the longest to '**more than 48 hours**.' How then does SBS set out a calendar when it is not possible to infallibly forecast a first sighting? Our answer is: SBS allows at least **24 hours** for '**a likely evening (or morning) first sighting**' of the new moon to occur before it begins a month. The method we use is explained in the answer to **Question 8** and examples are found at **Appendix A**.

Note: The reader should remember, however, that pre-printed calendars based on calculations were not used by the ancient Israelites. They literally looked out for the new moon each month and then counted to the feasts. This is still the best method.



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Question 2

When does the year begin in the Sacred Calendar? Does it begin in Israel's autumn as the Jewish calendar shows? Or should the year begin in the spring with the month of Abib (Nisan)? And if it begins with Abib, then how is Abib's new moon decided? Is it the new moon nearest (before or after) the Equinox? Or is it the first new moon after the spring equinox?

Answer

According to the Scriptures, the religious calendar begins in the spring with the Passover month of Abib, the month of Israel's Exodus from Egypt. In the popular Jewish calendar the year begins in the autumn at the end of the agricultural year. But in the **religious calendar**, and that is our prime consideration in this booklet, a year begins in the Passover month of Abib. Yahweh directed Moses in the following words concerning the first month of the year:

Exo.12:1 *And the LORD spake unto Moses and Aaron in the land of Egypt, saying, 2: This month shall be unto you the beginning of months: it shall be the first month of the year to you.*

Exo.14:3 *And Moses said unto the people, Remember this day, in which ye came out from Egypt, out of the house of bondage; for by strength of hand the LORD brought you out from this place: there shall no leavened bread be eaten. 4: This day came ye out in the month Abib.*

The name of the Exodus month is **Abib**. The word **Abib** means 'sprouting, budding,' a 'green ear of corn.' In other words in Abib the earth will spring to life, plants will sprout and bud and the corn (sown the previous year) will have *green ears*. The first month is also called Nisan. (Esther 3:7)

"Abib most nearly approaches our month of March, though in some years its end moves some distance into April." (Westminster Dictionary of the Bible. page 3, article Abib)

In ancient days, before the exact equinox times were known or calendars printed in advance, the Sanhedrin selected Abib's new moon on the basis of certain natural conditions because Yahweh's Feasts are directly linked to the agricultural seasons in Israel.

THE NATURAL CONDITIONS looked for were:

- The severity or mildness of the winter.
- The maturity of the barley harvest.
- The age of the young sacrificial pigeons and lambs.
- The conditions of the camping sites and roads for the pilgrims who would be coming to Jerusalem for the Passover etc.

In modern times Abib's new moon is selected months and even years in advance mainly because computer calculations of the sun's and moon's movements are widely available and there is no Sanhedrin to give the go-ahead as in days gone by. The scriptural guidelines concerning the link between the Feasts of the Most High and the harvests in Israel are, nevertheless, still being followed. They are:

1. Abib's new moon must occur before the spring harvest begins.

Deut. 16:9 *Seven weeks shalt thou number unto thee: begin to number the seven weeks from such time as thou beginnest to put the sickle to the corn.*

This instruction concerns the **waive sheaf** which is cut and waived before Yahweh at the Passover festival in the middle of Abib. Since the spring harvest in Israel begins in late March/early April (see agricultural chart under **Question/Answer 4**) this means that the 1st of Abib would begin some **15 days before** the waive sheaf was cut; which means that Abib's new moon would occur at about the time of the vernal equinox. The Westminster Dictionary of the Bible article **Year** confirms this:

"The year began with the month of Abib or Nisan (Exodus 12:2, 23:15, Esther 3:7) with the new moon next before or next after the vernal equinox."

2. Ethanim's new moon occurs after the autumn harvest.

The second clue fixes the festival of Ingathering (Tabernacles) at the **'end'** of the agricultural year. Here is the Almighty's command concerning the feast of ingathering (Tabernacles).

Exodus 34:22 *And thou shalt observe the feast of weeks, of the firstfruits of wheat harvest, and the feast of ingathering at the year's end.*

The Hebrew word translated **"year's end"** is *t@quwphah* or *"tequphah."* It means at the *end, the circuit of time, the revolution, the equinox.* In other words, Yahweh is here telling Israel that the Feast of Tabernacles should occur at about the time of the **autumnal equinox**, when the agricultural year is at its end. This is a vital clue because it links the harvest festival of Tabernacles to the autumnal equinox. A look at the agricultural scene in Israel will reveal that the harvests are mostly gathered in **before the tequphah - the equinox.** In fact the main (wheat) harvest begins in the summer months of May and June and is finished by August. The vintage (grape harvest) follows and is normally finished by the autumnal equinox. This is when Yahweh commanded Israel to keep the harvest festival of Tabernacles; at the **'end'** or the **turn of the year** when the harvests are gathered in. For more information concerning Harvest Times in Israel see the answer to **Question 4.**

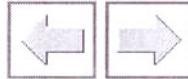
In summary we may say that in a pre-printed calendar, the first and seventh months of the year should still be geared to the **agricultural harvests in Israel**; the first month Abib, the month of green ears, starting about 15 days before the barley harvest is begun; and the seventh month (Ethanim/Tishri) starting after the vintage is gathered in. By starting Abib with the new moon nearest (before or after) the spring equinox, these two divine requirements are met.

Notes

1. If Abib were to begin 15 days before the spring equinox (the earliest it can ever be if the *'nearest, before or after guideline'* is being followed) then the **spiritual Passover** will coincide with the **celestial passover.** In other words: the sun will be **'passing over'** the equator at the same time the **sacred Passover service** is being celebrated. This phenomenon (of the celestial and spiritual Passovers coinciding) happens very rarely.
2. Note also that by choosing the new moon nearest the equinox, the Passover Service (which occurs 14 days later on the evening of the 14th Abib) will **never fall before the spring equinox**; that is - before the 20th March. The Passover Service may - very rarely - coincide with the equinox, when

the sun will also be apparently '*passing-over*' the equator; but it should never fall **before the equinox**. This means that when a calendar is printed in advance, the very earliest date for the 1st Abib will be the 7th March. It is perfectly in order to begin Abib before 20th March: the Jews do this in many years. But, I repeat, the Passover Service should not be celebrated before the equinox.

Always bear in mind, of course, that in ancient Israel the calendar was not published in advance. The choice of Abib's new moon depended on those '**natural conditions**' mentioned previously. Equinox times and phases of the moon calculations are simply a convenient forecasting facility, which allow us to keep in step with the seasons - and hence the harvests - in Israel.



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