

How Do We Determine The New Moon Day ?

Preparation for this Study

As usual, before you read this study, I ask you to do four things :

Firstly, pray to only receive YHWH's truth and to not be deceived by any false information.

Secondly, I challenge you to choose to be teachable – choose to have an open mind

Thirdly, please don't believe what I have written, but check the Scriptures to "test" what I have written. ([1 Thes 5:21](#), [Acts 17:11](#))

Fourthly, remember that we are studying to show ourselves approved to YHWH. ([2Tim 2:15](#))

Please refer to [Preparation for Studying YHWH's Word](#), for more details.

Note : Please remember that **the foundation of all my studies must be the Bible, the inspired, revealed and written word of YHWH, in its original languages.**

Whenever I quote from YHWH's Word, in this study I am quoting from "The Scriptures" version of the Bible.

Introductory Comments

Correctly determining the New moon is crucial. All of YHWH's appointed times (feasts) depend on it. It is vital that we know how to determine the New moon, so that we can keep our appointments with YHWH.

The subject of "when does a New Moon day begins", has been debated for a long time. There are two sides to this debate, and each side has presented logical and persuasive arguments to provide evidence to support that position.

To the new believer, and to many who have honestly studied this topic, this is a very confusing issue. Many are forced to admit that **they just do not know**, while others simply say, that they will have to wait until Yahushua the Messiah returns, and He sorts it all out.

As I have mentioned in other studies, when I realised that I had been deceived about many things during my life, I firmly decided, that I never ever wanted to be deceived again ! It was with this attitude, that I began this study about determining the New Moon day. I was, and am searching for only YHWH's truth !

As I study YHWH's Word, I have come to a **personal realisation**, and it is this. **There are relatively few things that are written in YHWH's Word, about which we can be absolutely certain !** For me, at this moment in time, this is one of those conclusions about which I cannot be certain. I will simply present to you, the various pieces of evidence I have found concerning each position, I will give you my analysis of that evidence, and at the end of this study, I will state my own personal conclusion about it, and give my reasons for my choice.

The two opposing theories can be briefly described as follows :

Theory one claims that the New Moon day is determined by the physical sighting of the first slither crescent of the moon, after the period of darkness, when the moon is between the sun and the earth.

Theory two says that the New Moon day begins a moment after the conjunction of the moon, the sun and the earth, often called the molad, which means “birth” in Hebrew.

Note – a theory is simply a possible explanation of an event.

The Case for the Crescent Moon Theory

I will present as comprehensive a list of evidence as I can, and whenever possible, I'll be using YHWH's definitions. I will not be commenting on the evidence at this point in my study. The evidence is not presented in any particular order.

1 The moon was created for the appointed times (Mo'adim).

Ps 104:19 declares:

"He created the moon for Mo'adim [appointed times]"

2 The following verses of scripture are used to support the first “sighting” of the Crescent Moon theory.

Gen 1:14

*And Elohim said, “Let **lights** come to be in the expanse of the heavens to separate the day from the night, and **let them be for signs and appointed times, and for days and years,***

Gen 1:16

*And Elohim made **two great lights: the greater light to rule the day, And the lesser light to rule the night, and the stars***

The reasoning for using these scriptures is explained as follows :

If YHWH gave us “lights for signs”, then we have to see them to know that they are signs.

This idea is further explained by using the analogy of Stop signs at street intersections. If it was dark, and we were unaware that the Stop sign was there, how could we see it, and use it? Advocates for the Crescent Moon theory say that YHWH gave us “lights for signs”, so that we could see them.

3 The author of sightedmoon.com, Joseph Dumond, explains a theory that uses Biblical astronomy, involving the constellation Virgo and modern astronomical software, and several scriptural verses, as evidence to support the sighting of the first crescent moon, as the beginning of the New Moon day.

I have not attempted to describe or explain this theory because I do not feel I can do it justice in this forum, but it is a very well presented and interesting study that I recommend for your consideration. Please click the following website to access this study.

http://www.sightedmoon.com/?page_id=22

4 The Scripture verses from 1 Samuel chapter 20 dealing with David and Jonathan planning David's possible escape from King Saul, are often cited to support the Crescent Moon theory.

1 Shemuel 20:5

“And Dawid said to Yochanon, ‘see tomorrow is the new moon, and I ought to sit with the sovereign to eat. But let me go and I shall hide in the field until the third day evening.’”

1 Shemuel 20:18

“So Yochanon said to him, ‘ tomorrow is the new moon and you shall be missed because your seat shall be empty.’”

A The reasoning here is based on the notion that the new moon specifically mentioned in these verses covers a period of three days, that is, the day they are in, tomorrow “is the new moon”, and David’s hiding in the field until the third day. Because the first sighting of the sliver crescent can only be seen for a short time, it is argued that the people would have prepared for the feast ahead of time, so that they would be ready.

B Rabbi Edward Nydle, in his study, “New Moons (Rosh Chodesh) For Messianic Yisrael: Past, Present, and Future”, suggests from the above verse, **1 Sam 20:5**, that the New Moon was a festival time. He says that **Amos 8:5** intimates that it was possibly observed as a Sabbath.

For more details, refer to :

http://www.bnaiavraham.net/teaching_articles/english_teachings/RabbiEd/new_moons.pdf

Amos 8:5

“When does the New Moon pass so that we sell grain, and the Sabbath so that we trade our wheat

5 The Karaites (and Rabbi Nydle) propose the follow evidence to support the Crescent Moon” theory.

The Hebrew word translated as “month” is “chodesh”. In his study, Rabbi Nydle explains that the Hebrew word “chodesh” means “New Moon” or the “New Moon day”, and only by extension, came to mean “month”, the period between one New Moon and another.

The Karaites and Rabbi Nydle describe the crescent moon as the “new” moon because the crescent moon is the first visible sighting of the moon after the moon is “re-newed”, after the period of time, when it is not visible from earth. They say that “seeing the first crescent” is evidence for the moon being “renewed”.

(For more details, refer to http://www.karaite-korner.org/new_moon.html)

The proponents of the Crescent Moon theory also say that the modern astronomical term “new moon” has a different meaning to the “original” meaning.

6 The calculation of the conjunction of the moon didn’t happen until the times when the southern kingdom of Israel was taken captive by the Babylonians.

I have not been able to find direct evidence for this, but the following statement from a study on the Biblical calendar by the author of “[littleguyintheeye.com](http://www.littleguyintheeye.com)”, page 11, tells us this.

“After the Babylonian captivity the Jews carried back with them the Babylonian solar/lunar calendar and used it to determine the dates for high Holy Days”.

7 Crescent Moon advocates believe that there was no way the ancient Israelites could “figure out” exactly when the conjunction was.

The Crescent Moon people claim that because the ancient Israelites were unable to calculate the specific time of the conjunction, it follows that they used the sighted first sliver crescent moon.

8 Crescent Moon advocates say that the ancient Israelites were well acquainted with “seeing” the crescent moon.

Zech 14:6 implies that Yom Teruah, the day only YHWH knows, will have light in the evening from the first sliver crescent of the New Moon.

Zech 14:7

And it shall be one day which is known to יהוה, neither day nor night, but at evening time there shall be light.

9 The Talmud claims that during the 2nd Temple period, the new moon was proclaimed by the crescent sighting.

Talmud Tractate Rosh Hashanah ('Head of the Year') records the interrogation methods used by the Priesthood, and tells us the questions the priests asked of the witnesses, in order to verify whether or not they had actually seen the First Crescent Sliver.

"How do they test the witnesses? The pair who arrive first are tested first. The senior of them is brought in and they say to him, "Tell us how you saw the moon, in front of the sun, or behind the sun? To the north of it, or to the south? How big was it, and in which direction was it inclined? And how broad was it?" If he says "In front of the sun," his evidence is rejected. After that they would bring in the second and test him. If their accounts tallied their evidence was accepted, and other pairs were only questioned briefly, not because they were required at all, but so that they should not be disappointed, [and] so that they should not be dissuaded from coming." [Mishnah, Rosh Hashanah 23b]

The reason the priesthood was able to ask the witnesses such specific questions about the moon's appearance is that because the earth sits on its axis at an angle, the moon's summer and winter flight paths are different. Because of this, the horns of the first crescent sliver point in different directions at different times of year. In the summer, the horns point more to the left, whereas in the winter, the horns point more upwards, as the moon lies more 'on its back.' The moon also appears bigger or smaller in the sky depending upon where the moon is in its orbit. If the moon is closer to the earth, the moon appears larger; and if the moon is farther away, it appears smaller. While it is possible that a malicious witness could keep track of these things well enough to fake his testimony, it is unlikely that such things would regularly pass the Levitical interrogation.

10 Deut 16:1 supports the Crescent Moon theory

Deut 16:1

"Observe the month of Abib, and perform the Passover to יהוה your Elohim, for in the month of Abib יהוה your Elohim brought you out of Mitsrayim by night.

11 Matt 24:36 talks about the day and hour that no man knows.

Matt 24:36

But concerning that day and the hour no one knows, not even the messengers of the heavens, but My Father only

Joseph Dummond, in http://www.sightedmoon.com/?page_id=20, writes about the Return of Yahushua. He makes many good points, one of which concerns the fact that we do not know the day nor the hour of His return. Mr Dummond goes on to say that he believes (it is his theory), that Yahushua will return on the feast of Trumpets, the first day of the seventh month (a New Moon day).

He writes "When the Messiah returns on the Feast of Trumpets, no one will know the hour nor the day, because they won't know if the moon is going to be sighted today or the next day. [I am referring to a crescent Moon with 1% visibility. A Moon with 2% or more should be easily seen.]"

The Case for the Molad (dark) Moon Theory

This idea proposes that the start of the Hebrew month occurs a moment very soon after the moon moves past the conjunction, that is, a moment after the earth, the moon and the sun are in a straight line.

The following points are put forward as evidence for this position.

1 YHWH is a very orderly Being

- (a) Everything that our Heavenly Father does has judicial order.

Simply put, YHWH's judicial order involves all the processes that He set out at creation of how things will work, such as gravity. His order sets precedent for his creation, and for our lives, and how we are to worship Him. So when looking at what constitutes a new moon according to Scripture, we will look at the precedents that He has set.

- (b) YHWH does not change.

Mal 3:6

For I am YHWH, I change not

- (c) YHWH defines what faith is.

Faith is the evidence of things not having been seen – in a sense, it is evidence that comes from a void or from darkness. The following verses are quoted to support this idea.

Heb 11:1

Now faith is the substance of things being hoped, the evidence of things not having been seen.

Heb 11:3

By faith we understand the ages to have been framed by the Word of YHWH, so that the things seen should not come into being out of things that already appear.

Here we see that the precedent laid out at creation is that the things created did not come into being out of things that already appeared. The same way that the world started in darkness (**Gen 1:2-3**), and the day starts in darkness, and even life in the womb starts in darkness, the precedent set is that the month starts at conjunction, the exact time each month that the earth, the moon and the sun are lined up in perfect order.

2 YHWH is perfect and symmetrical

When you see a quarter moon, the month is $\frac{1}{4}$ over. When you see a full moon, the Month is half over. When you see a waning $\frac{1}{4}$ of a moon, the month is $\frac{3}{4}$ over, and when the moon is dark again at its conjunction, it is "resetting" the new month.

3 The only scripture verse given concerning the new moon is **Ps 81:3**.

Psa 81:3

Blow the ram's horn in the new moon, at the full moon, on our feast day

- i Here the Molad Theory people say the full moon is referring to "our feast day". Which feast occurs on the full moon, the 15th day of a month? In this case, they believe it is the feast of Tabernacles or Sukkot. The feast of Unleavened Bread is also on the 15th Day of Aviv. This is the day the Israelites left Egypt "by night" (Deut 16:1). They could easily have travelled at night by using the full moon's light.
- ii **Psa 81:3** is written in Hebrew syntax, which means it is written in opposites such as black/white, male/ female, so the opposite of the full moon is the new moon, which can only be at its conjunction.

4 There are a variety of sources that support the Molad Theory

- A The Targum version of **Psa 81:4** states :

Blow the horn in the month of Tishri, in the month in which the day of our festivals is concealed

- B In the apocryphal book of Enoch, this concept is spoken of in **Enoch 78:2-3**
2 He showed me every ordinance respecting these, which takes place at all times and in all seasons under every influence, in all years, at the arrival and under the rule of each, during every month and every week. He showed me also the decrease of the moon, which is effected in the sixth gate; for in that sixth gate is its light consumed.
3 From this is the beginning of the month; and its decrease is effected in the sixth gate in its period, until a hundred and seventy-seven days are completed; according to the mode of calculation by weeks, twenty-five weeks and two days.

- C The Talmud, Sanhedrin 11b quotes **Psa 81:3** as :

Blow the horn at the new moon, at the covering of the moon our feast day

- D In the King James version, Psa 81:3 is as follows :

*Blow up^{H8628} the trumpet^{H7782} in the new moon,^{H2320} in the time appointed,^{H3677}
on our solemn feast^{H2282} day.^{H3117}*

The Hebrew word, *keseh*, translated as “time appointed” is Strong’s word H3677. The only other time it is used in the Tanach, is in **Prov 7:20**.

Pro 7:20

*He hath taken^{H3947} a bag^{H6872} of money^{H3701} with^{H3027} him, and will come^{H935}
home^{H1004} at the day^{H3117} appointed.^{H3677}*

- E John Gill’s commentary on **Proverbs 7:20** reads :
“**and will come home at the day appointed**; and not before: Aben Ezra interprets it, at the beginning of the month, **at the new moon, when the moon is covered (b)**, **Targum** calls it the day of the congregation; some fixed festival day, when the congregation meets together; and at such a festival, or appointed time, this good man had fixed for his return, and when, and not before, he would.

John Gill’s commentary on **Psalm 81:3**

Psa 81:3 – Blow up the trumpet in the new moon,.... Either in every new moon, or first day of the month, which was religiously observed by the Jews, **2Ki 4:23** or rather the new moon, or first day of the seventh month, the month Tisri, which day was a memorial of blowing of trumpets, **Lev 23:34**, and so the Targum,

“blow the trumpet in the month of Tisri,” in the time appointed; so Aben Ezra, Jarchi, and Kimchi, interpret the word of a set fixed time; see **Pro 7:20**, **the word (a) used has the signification of covering; and the former of these understand it of the time just before the change of the moon, when it is covered**, which falls in with the former phrase; and so the Targum, “**in the moon that is covered**;” though the Latin interpreter renders it, “in the month which is covered with the days of our solemnities,” there being many festivals in the month of Tisri; the blowing of trumpets on the first day of it, the atonement on the tenth, and the feast of tabernacles on the fifteenth.”

- F **The Targum** on **Numbers 28:14** and the New Moon
“This burnt sacrifice shall be offered **at the beginning of every month in the time of the removal of the beginning of every month in the year**; and one kid of the goats, for a sin offering before the Lord **at the disappearing (failure) of the moon**, with the perpetual burnt sacrifice shalt thou perform with its libation.”

G Rashi

“The beginning of the lunar month occurs at the moment of conjunction between the sun and the moon; i.e. at the moment when the position of the moon is exactly between the earth and the sun. At this point, termed as the molad, or “birth”, the moon is not visible from the earth. At least six hours must pass before a very small portion of the moon will reappear. The day on which this occurs is regarded as the first day of the new month.”

For more details, refer to :

<http://littleguyintheeye.wordpress.com/2009/09/06/biblical-calendar/>

5 At the time Yahushua lived, the New Moon was determined by the Molad method.

Hillel the Elder reinstated conjunction observance in 10 B.C.

“Hillel (ca. 60 B.C.-A.D. ca. 10) was a Jewish scholar and founder of a dynasty of patriarchs who were the spiritual heads of Jewry until the 5th century.

Sources of information about Hillel are meager and must be sifted from many legends which subsequent generations have spun about him. Hillel, known as Hillel Hazaken, or **Hillel the Elder**, was born in Babylonia and was said to have descended from the house of David.

Impelled by a thirst for learning, he migrated to Palestine at a mature age (ca. 40 B.C.) and arrived in Jerusalem only a few years before Herod the Great ascended to the Judean throne. In Jerusalem, Hillel studied at the academy of two highly reputed scholars, Shmaiah and Abtalion, while earning a meager livelihood as a manual laborer. Half of Hillel's wages went for the support of his family, while the remainder was used for tuition at the academy.

Hillel devoted himself to his studies with great zeal and skill and succeeded in attaining the rank of *nasi*, prince or president of the Bet Din Hagadol, the High Court of ordained scholars known as the Great Sanhedrin. This was the supreme legal and judicial body in Judea.”

The only source found of this statement is :

<http://littleguyintheeye.wordpress.com/2009/09/06/biblical-calendar/>

If it is true, then it would have been the accepted way of determining the “New Moon” during Yahushua’s life time. If it was not accurate at that time, then surely, Yahushua would have corrected it.

6 YHWH planned for His son Yahushua to be crucified on a Wednesday in 30 A.D.

We know that Yahushua was not crucified on a Friday, as you can not get three days and three nights in the grave from Friday afternoon until Sunday morning (Math 12:38-40), but He was crucified mid week. Now if you go to the year He was crucified in 30 A.D., you can only come up with a mid week crucifixion if you start your month by conjunction, but if you are visibly sighting a crescent, you are back to a Friday crucifixion, which is impossible according to Scripture. There is ample historical proof to clearly show a 30A.D. crucifixion.

7 The only new moon day that is a Sabbath of rest is the first day of the seventh moon, Yom Teruah or the feast of Trumpets (Lev 23:24)

From **1 Sam 20:18** above, "Jonathan" knew in advance that the new moon *was coming*, since the "old moon" crescent before SUNRISE (on the day he is speaking), is a sure indication that the New Moon day is one day away. The NEW MOON FESTIVAL he referred to must have been the first day of the seventh moon, which is the commanded feast, Yom Teruah, or the day of the blowing the shofar.

8 The original Paleo-Hebrew meaning of “New Moon” supports the Molad theory.

The Hebrew word translated as “new moon” is chodesh (as previously stated in point 5 for the Crescent Moon theory). It comes from the root word, chadash, **חדש** which is composed of the Hebrew letters, Chet, Dalet, and Shin. A study of the Paleo-Hebrew tells us that :

Chet can mean **wall** or **separation**

Dalet can mean **door** or **path**

Shin can mean **eat** or **consume**

Literally, chadash can mean, the separation of the pathway of the consuming (moon).

The Hebrew letters Chet and Dalet together form a word that means **unity** or **united**. In Paleo-Hebrew, it is a picture of a wall and a door, or a “wall door”.

The moon is only **united** at two points – when it is completely dark or when it is completely full of light. The idea of the moon (Shin) being completely dark, supports the Molad theory.

9 The Jewish historian Philo explains that the ancient Israelites were well acquainted with the conjunction of the moon

The Jewish historian Philo, a very prominent Jew of Alexandria, Egypt, who lived before, during, and after the life of Yahushua, the Messiah, writes :

...there are two motions of the moon as it continually runs its double-course – the motion of waxing until the full moon and the motions of waning until its conjunction with the sun... the moon waxes and wanes in equal intervals, both as it increases and diminishes in illumination... it receives the perfect shapes in periods of seven day – the half-moon in the first seven day period after its conjunction with the sun, full moon in the second; and when it makes its return again, the first is to half-moon, then it ceases at its conjunction with the sun.

In the next two sections, I will state or describe the problems with each theory, and then make a comment about each problem. This comment may include a response to the criticism.

Problems with the Crescent Moon Theory

As an introductory point that can apply to both arguments, it is important to acknowledge that there was some kind of “calculation” involved in determining the day of the New Moon. **1 Sam 20:5** and **18** both support this. Each says “tomorrow is the new moon”, meaning that they knew in advance when it was, and so had to calculate it in some way.

a) The Full Moon will never fall on the 15th day of the month

If you use the first crescent moon sliver as the start of the Hebrew month, you can NEVER get the Full Moon to fall on the 15th day of the month – it will always be late. If we have an appointment with our Creator, on His appointed Day, wouldn't it be terrible if we were late !

b) The symmetrical pattern of the moon cycle would be out of sequence

If someone was starting the new month by visually sighting a crescent moon, then when you see a quarter moon, it would not be $\frac{1}{4}$ of the month over, and when you see a full moon, it would not be $\frac{1}{2}$ of the month over. It would throw off the symmetrical sighting of the whole moon.

c) Observing the first crescent moon is impossible when it is cloudy

What if it is cloudy ? How would one visibly site a moon in such conditions, they would have to postpone the new month even though the moon may be visible because they can not see it due to the cloud cover. This would be no different than the postponement rules of the rabbis.

d) The Hebrews were never told to view the crescent moon to begin the first month while in Egypt.

There is no scripture verse directing anyone to view the first sliver of the crescent moon to declare the New Moon Day.

e) YHWH commanded the Hebrews not to look at or worship the sun, the moon and the stars.

Deut 4:19

and that you not lift up your eyes towards the heavens and when thou see the sun and the moon and the stars, even all the host of heaven, and you be drawn away and worship them, and serve them; which YHWH your Elohim has allotted to all the peoples under all the heavens.

It seems unlikely, that in an area where people were worshipping the sun and moon and stars (Egypt), and with the Israelites propensity to paganism as is seen with the golden calf incident, that YHWH would really have them go every month out to site a crescent moon? It would be like sending an alcoholic to watch a room full of whiskey, and telling him not to drink.

f) Some kind of calculation was used by Jonathan in 1 Sam 20:5, for him to know that “tomorrow is the new moon”.

The argument put forward using 1 Sam 20:5 specifically states that Jonathan says that “tomorrow is the new moon”. This clearly implies that there has to be a calculation of some kind. It is impossible to know that the crescent moon is “tomorrow”, without some calculation.

g) The rules for the first sighting of the crescent moon are not precise.

The following explanation by Norman Willis relates to the first crescent sliver observation. (For more details, refer to <http://www.nazareneisrael.org/>)

“The Hebrew month is typically either 29 or 30 days long. But why is this? If the earth was stationary, the moon would make a complete 360 degree orbit about the earth approximately once every 27.5 days (on average). That means if the earth was standing still, it would take the moon 27.5 days, on average, to get back into alignment where the First Crescent Sliver could be seen from the earth.

However, since the earth is not stationary, but moves about the sun, it takes the moon two extra days (on average) before it ‘catches back up’, and comes back into an alignment from which the First Crescent Sliver can again be seen from the earth.

Because the moon has to travel for approximately two more days before the First Crescent Sliver can be seen from the earth again, it takes approximately 29.5 days (on average) to go from one First Crescent Sliver to the next. In practical terms, what this means is that the Hebrew month is normally either 29 or 30 days long; and that is why, on the evening ending the 29th day of the month, observers in the Land of Israel go outside just before eventide, and look for the first crescent sliver of the new moon up in the sky. If they see the First Crescent Sliver, they go and tell the Priesthood at the Temple Mount.”

In his explanation for determining the New Moon using the sighting of the “first crescent sliver”, Mr Willis uses terms like “average” and “approximately”. For me, this method is not precise enough to be relied upon.

h) Can the Talmud be trusted as historical fact ?

While I am certainly no authority on the Talmud, I have read articles that criticise its historical accuracy. It seems obvious to me, that the authors of the Talmud would only include information that supports their beliefs, and is therefore biased.

i) Using Jerusalem time to decide the New Moon

Some argue that the only way to properly keep the appointed times correctly is to know the timing of the new moon from Jerusalem, thus using Jerusalem time. The problem with this idea is that until recently, no one living outside of Israel would have been able to know when the first crescent moon was sighted in Jerusalem. If you go by a local sighting you can have up three different days for an appointed time, across the world.

j) The crescent moon was used by the ancient world.

The worshippers of Diana (Artemis, Ishtar, Venus, Asherah, etc) used it as her symbol, as do the Ishmaelites (and Islam) today.

Problems with the Molad Moon Theory

A There is disagreement over the meaning of the Hebrew word, *keseh*, used in [Ps 81:3](#)

Psa 81:3

Blow up ^{H8628} the trumpet ^{H7782} in the new moon, ^{H2320} in the time
appointed, ^{H3677} on our solemn feast ^{H2282} day. ^{H3117}

(KJV with Strong's Numbers)

We notice that the Hebrew word used for "time appointed" is "keseh". The "molad moon" people say it comes from the root word "kesah" which means to cover or conceal. They say this supports the "dark moon" position, and translate it as :

Psa 81:3

Blow the ram's horn in the new moon, **at the full moon**, on our feast day

Proponents of the Crescent Moon Theory, claim that there is a problem with the second part of the verse which say the "kesah is the day of our chag (feast). They say the Hebrew word, # H3677 is "chag", and always refers to the pilgrimage feasts of Unleavened Bread, Shavuot and Tabernacles.

The Crescent Moon theory proponents say that the New Moon day is never classified as a "pilgrimage feast" i.e., a "chag", but is a mo'edim. They claim that this verse can't be referring to Yom Teruah, since it is not a "pilgrimage feast".

Running a search in the e-Sword version of the King James Bible, with Strong's Numbers, I found "chag" was used in one other place, namely, in [Exod 32:5](#) when Aharon declares a day a feast (when the golden calf is made). I am fairly sure that the feast Aharon was declaring was not a pilgrimage feast.

Exod 32:5

And when Aaron ^{H175} saw ^{H7200} it, he built ^{H1129} an altar ^{H4196} before ^{H6440} it; and
Aaron ^{H175} made proclamation, ^{H7121} and said, ^{H559} Tomorrow ^{H4279} is a feast ^{H2282}
to the LORD. ^{H3068}

B The Crescent Moon theory people say that their method was used during Yahushua's lifetime

Crescent Moon proponents say that if the First Crescent Sliver method was in place during Yahushua's lifetime, and if it was incorrect, He would have mentioned it.

While I have only found one source for this information, it is claimed in point 5 above, that in 10 B.C., Hillel the Elder, not Hillel II, re-introduced the conjunction observance. (Refer to <http://littleguyintheeye.wordpress.com/2009/09/06/biblical-calendar/>)

C Opponents of the Molad Moon Theory claim that the ancient Hebrews were unable to calculate the time of the Moon's conjunction.

The major problem with using the Molad to determine the start of the new month is calculating WHEN the conjunction of the moon occurs.

There are at least two methods that can be used to calculate the day of the conjunction, using ancient Hebrew knowledge.

Method 1

Method 1 is an adaptation of a method described by an unidentified person at the following website.

<http://nazareneisraelitetrueamenetwork.ning.com/forum/topic/show?id=2151662%3ATopic%3A14768>

This method relies on the following information that can be obtained or deduced from simple observation of the moon's repeated cycles.

- 1 The **last** sliver or crescent moon **before** the "dark moon" interval begins, is seen in the east, just before dawn. The first sliver after the "dark moon" interval, can be seen in the west, just after sunset.
- 2 The "dark moon" interval can be from 1.5 to 3.5 days in the Middle East.
- 3 From these two sightings, it can be determined, that the conjunction, the time when the earth, the moon and the sun are in a straight line, is exactly mid way between the last sighting and first sighting of the crescent moon.

My research tells me that the shortest time for observing the "**first** crescent sliver" moon with the naked eye is 15.5 hours after the actual conjunction.

Refer to the following quote from the US Naval Observatory website for specific details.

<http://www.usno.navy.mil/USNO/astronomical-applications/astronomical-information-center/cres-moon-vis>

"The record for an early sighting of a lunar crescent, with a telescope, is 12.1 hours after New Moon; for naked-eye sightings, the record is 15.5 hours from New Moon. These are exceptional observations and crescent sightings this early in the lunar month should not be expected as the norm."

To understand this method, let's look at some possible scenarios. For the purpose of this exercise, each day begins at sunset, with the left part of a day showing darkness and the right part showing daylight. Let's assume that sunset is at 6 pm and sunrise is at 6 am. Day 1 begins at 6 pm and lasts until just before 6 pm the next day.

C will indicate when the last waning crescent moon (last sliver) is visible

C will indicate when the first waxing crescent moon (first sliver) is visible

C represents the approximate time of conjunction

Scenario 1 The first crescent moon appears 1.5 days after the last sighting of the waning crescent moon.

C				C					
		C							
Day 1	Day 2	Day 3	Day 4	Day 5					

Explanation of Scenario 1

The last waning crescent, **C**, can be seen just before sunrise in the east, say 5:45 am, on Day 1.

The first waxing crescent, **C**, can be seen just after sunset in the west, say 6:15 pm, Day 3.

The time between the last waning crescent and the first waxing crescent is 1.5 days or 30 hours. The mid way point is 15 hours after the sighting of the last waning crescent.

The conjunction point, **C**, is the time mid way between these two sightings. It is approximately 9 pm, on Day 2.

Note

The time from the last waning crescent to the first waxing crescent is about 30 hours.

Scenario 2 The first crescent moon appears 2.5 days after the last sighting of the waning crescent moon.

C						C			
			C						
Day 1	Day 2	Day 3	Day 4	Day 5					

Explanation of Scenerio 2

The last waning crescent, **C**, can be seen just before sunrise in the east, say 5:45 am, on Day 1.

The first waxing crescent, **C**, can be seen just after sunset in the west, say 6:15 pm, Day 4.

The time between the last waning crescent and the first waxing crescent is 2.5 days or 60 hours. The mid way point is 30 hours after the sighting of the last waning crescent.

The conjunction point, **C**, is the time mid way between these two sightings. It is approximately 12 pm, on Day 2.

Note

The time from the last waning crescent to the first waxing crescent is about 60 hours.

Scenario 3 The first crescent moon appears 3.5 days after the last sighting of the waning crescent moon.

C								C	
			C						
Day 1	Day 2	Day 3	Day 4	Day 5					

Explanation of Scenario 3

The last waning crescent, **C**, can be seen just before sunrise in the east, say 5:45 am, on Day 1.

The first waxing crescent, **C**, can be seen just after sunset in the west, say 6:15 pm, Day 5.

The time between the last waning crescent and the first waxing crescent is 3.5 days or 84 hours. The mid way point is 42 hours after the sighting of the last waning crescent.

The conjunction point, **C**, is the time mid way between these two sightings. It is approximately 12 am, on Day 3.

Note

The time from the last waning crescent to the first waxing crescent is about 84 hours.

How do we “calculate” the conjunction day using “ancient Hebrew” knowledge?

Method 1 (above)

Method 1 involves only TWO steps.

- 1 Identify the last day of the waning crescent – it is part of Day 1, as in the diagrams above.
- 2 Go to the beginning of Day 3 (sunset - the dark part of a day in the diagram), and label this as the New Moon Day.

Explanation

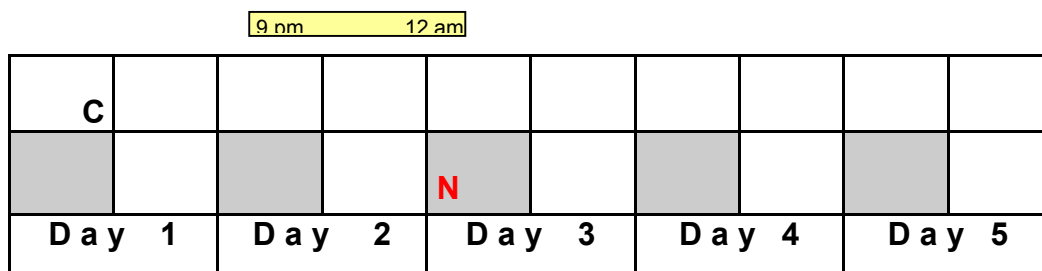
Because the minimum time for the “dark moon” interval is 1.5 days or 30 hours, then the earliest time for the conjunction will be 15 hours after the sighting of the last crescent. Similarly, because the maximum time for the “dark moon” interval is 3.5 days, then the latest time for the conjunction will be 42 hours after the sighting of the last crescent. In other words, the conjunction must occur sometime between this 15 hour mark and the 42 hour mark.

Using our 6 pm as sunset and 6 am as sunrise information above, conjunction would occur some time between 9 pm on day 2 and 12 am on day 3 (refer to the yellow box in the diagram below).

Applying steps 1 and 2 on page 12, if the last crescent was observed just before sunrise on Day 1, the New Moon day, **N**, would begin at the beginning of Day 3, at sunset.

When we use this method, the various phases of the moon line up sometime during the appropriate day. For example, the “full moon” will be on the 15th Day of the Hebrew month. The only way to really be sure that we have the correct day is by counting back from the full moon, day 15 of the Hebrew month.

A simple way to visibly tell if the moon is full, is to observe the moon carefully. The full moon occurs in the eastern sky a few minutes just before or after the sun has set in the western sky. If the moon is in the sky more than 40 minutes before the sun sets, you are one day early. If the moon doesn’t rise until about one hour after the sun has set, you are one day late.



Note

This method is based on the following information :

- 1 the minimum time between conjunction and the sighting of the first crescent is 15.5 hours,
- 2 the moon is not visible for 1.5 to 3.5 days, and
- 3 the conjunction cannot be part of the New Moon day.

I am NOT attempting to pin-point the exact time of the conjunction. All I am doing is identifying the New Moon Day.

This method statistically, is 75% accurate.

Method 2

This method is described in detail by Matthew Janzen at the following website.

http://www.walkinthelight.ca/new_moon_regulations.htm

Another excellent resource on this topic can be found at the website of James Dailley.

<http://ccg.org/english/s/p078.html>

Background Information

- + The old moon ends a moment prior to conjunction.
- + Conjunction occurs at the moment that the sun, moon and earth are in a straight line.
- + The Hebrew word for month is “chodesh”. It is Strong’s word # 2320 which is translated as new moon or by implication, a month. Chodesh comes from a primitive root, “chadash” which means “to be new” or “to repair or rebuild”.
- + The moon begins to “renew or repair or rebuild”, a moment after the conjunction occurs.

Steps to determine (calculate) the conjunction

- 1 Before sunrise on the 29th day of the month, go outside and look towards the horizon in the eastern sky. Often a waning crescent can be seen there. If we can observe this thin crescent at this time, there is a high probability that the conjunction will not occur until the next (Hebrew) day. This is because the moon hasn’t wanned down quite enough for the conjunction to happen in the day you are observing it.
- 2 If you look before sunrise on the 29th day and do not see a thin crescent, you know that the moon has wanned far enough, and so there is a high probability that the conjunction will occur during “that” day.

Note : This method has a high probability of determining the day of the conjunction.

Examples to illustrate this method

A It is the 29th day of the month and 30 minutes before sunrise (at say, 6 am), we observe a thin crescent in the eastern sky.

Conclusion : The conjunction will be during the next day (30th day), and the New Moon day will begin at the start of the next (Hebrew) day after the 30th day.

B It is the 29th day of the month, and 30 minutes before sunrise, there is no thin crescent visible in the eastern sky.

Conclusion : The conjunction will be during the current day, and the New Moon day will begin at the start of the next (Hebrew) day.

If the conjunction occurs at 5 pm when sunset is at 6 pm, then the New Moon day begins at sunset on the day after the 30th day.

If the conjunction occurs at 7pm when sunset is 6 pm, then the New Moon day begins at the start of the next (Hebrew) day.

Which day is the New moon day ?

Matthew Janzen has the following explanation of which day is the New moon day.

The day that the conjunction happens in, scripturally, is not the best choice for when the New Moon is kept. It is not scriptural to use a day that is part of the old moon month (if we did this for say, Yom Teruah, the first day of the seventh month, the month would be calculated from an old moon month). This day does not fit the phrase in scripture, “the day of the new moon”.

A day is defined in scripture as being from “...evening to evening...”. A new moon is defined by various Hebrew lexicons as meaning “a rebuilding”. Thus **the day of the new moon is the first 24 hours** (evening to evening) **of the rebuilding**. This could not be the day the conjunction happens in, seeing that some hours of the day were not in a rebuilding moon, but rather in an old waning moon.

1 John 1:5 tell us, that

And this is the message which we have heard from Him and announce to you, that Elohim is light and in Him is no darkness at all.

Any darkness in YHWH Elohim would make him “not all light”. Using this analogy, any oldness in a new moon day would corrupt the actual first official day of the new moon. (**Luke 11:35** supports this idea).

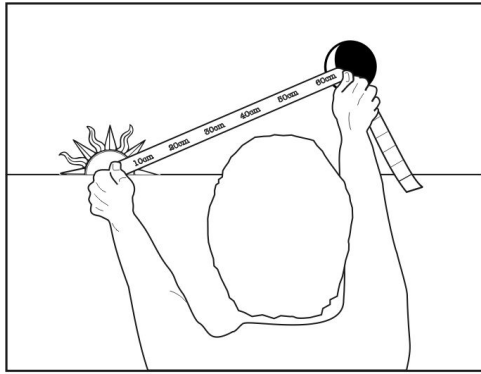
Lev 11:24-25, speaking about being unclean “until evening”, also supports the idea that a day can be “corrupted” unless it is a whole day of something. There are several other scriptures that support this idea. (**Lev 14:46, 15:5-8** and **Num 19:7**)

With this information in mind, it seems logical that the New Moon day must be the day after the day in which the conjunction occurs.

How can the day of the next conjunction be determined ?

Use this method during the last 7 days of a New Moon month.

- 1 When the sun is rising, hold a 100 centimetre tape measure 60 centimetres from your eye, and measure the distance from the centre of the sun to the centre of the moon, as shown in the diagram below. (*This will take some practise*).
- 2 Record the number of centimetres from the sun to the moon.
- 3 Record the day and the correct local time to the nearest minute.
- 4 Since the moon moves at approximately 0.5 centimtres per hour, multiply the number of centimetres by 2. This gives us the approximate number of hours until the next conjunction.
- 5 Divide the answer by 24 to convert the number of hours to days and hours.
- 6 Add this time to the time you recorded in step 3, and this will give you the time of the next conjunction.



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Diagram from <http://ccg.org/english/s/p078.html>

Example (using the steps above)

- 2 The distance between the sun and the moon is 62 cm.
- 3 It is April 14th and 6:46 am local time.
- 4 Multiply 62 by 2 = 124 hours
- 5 Divide by 24 (124/24) = 5 days and 4 hours
- 6 Add 5 days 4 hours to 6.46 am gives us 10:46 on April 19th.

Using this method, the conjunction time we calculated was 2 hours 45 minutes later than the published time of the conjunction.

If you wish to be more precise, divide the number of centimetres by 0.51 (a more accurate speed for the movement of the moon).

This is a basic set of rules for calculating the next conjunction. If you wish to know more about this method, I refer you to the website of James Dailley.

<http://ccg.org/english/s/p078.html>

Comment : I applied this method in determining the next New Moon and found it to be reasonably accurate.

Analysis and comments of the Crescent Moon Theory

I will address each piece of supporting evidence separately. My personal assessment of which theory is more correct will be given under the heading “My Personal Conclusions”, later in this study. (Refer to pages 2-4 above).

- 1 I agree with the point that the moon is created by YHWH for His appointed times – this idea applies to both theories.
- 2 While I appreciate the explanation concerning the “seeing” of “signs”, and “observing” something, I believe we can determine the new moon without seeing it specifically with our eyes – seeing it is not the only way something can be a sign.

Another point related to this concerns the Hebrew meaning of the word translated as “sign”. It is Strong’s word, # H226, and can mean a signal (literally or figuratively), as a flag, beacon, monument, omen, prodigy, evidence, mark, miracle, (en-) sign, token. Doesn’t the moon act like a beacon when it turns on and off, as it goes through its cycle ?

- 3 The theory put forward by Joseph Dummond of sightedmoon.com is interesting, and could be true. However, computer software is created using models which rely on a variety of “assumptions”. Some people want to accept this “scientific” theory but are unwilling to accept other scientific theories such as the theory of scientific dating. I, therefore accept that this could be correct, but this evidence is for me personally, a “bit far out”, because the assumptions used could be incorrect.

- 4 The interpretation of 1 Samuel chapter 20 is questionable, since it could just as likely be referring to the feast of Yom Teruah, not the New Moon – see Molad Moon point 5. Rabbi Nydle’s arguments are, for me, unconvincing – he seems to be relying on possible word meanings, not actual ones. In paragraph 3 on page 10 above, I explained my concerns about his conclusion here.
- 5 The Karaite arguments apply to both ideas.
- 6 I have not been able to find convincing evidence to support or refute this statement.
- 7 The notion that the ancient Hebrews did not have the knowledge or the ability to calculate when the conjunction occurs is incorrect. One only has to look at structures such as the Great Pyramid in Egypt, to realise the ancient peoples had amazing mathematical knowledge.
- 8 I agree that the ancient Israelites were well acquainted with “seeing” the crescent moon, and all the different phases and shapes of the moon.
- 9 The Talmud is a “document” produced by rabbinic Jews. It seems obvious that they will only record information that agrees with their theological position. It therefore, has a bias.
- 10 The first Hebrew word, in Deut 16:1 is Strong’s word # 8104. It is often translated as “observe”. A careful study of the use of this word will show that it can also mean to hedge, guard, protect and observe. Since this word has several other meanings, it seems inappropriate to rely on this translation of the word, when using this verse as evidence to support the Crescent Moon theory.
- 11 The point that Yahushua tells us in [Matt 24:36](#), that no one knows the day or the hour, is convincing information. Joseph Dummond’s theory is that Yahushua will return on the first day of the seventh month, and since we can’t see a crescent moon of less than 2% illumination, we therefore won’t know the “day or the hour”. If he is correct, there is not much we can say against this theory.

Analysis and comments of the Molad Moon Theory

(Refer to pages 4-8 above).

- 1 YHWH is a very orderly Being – everyone agrees with this.
- 2 YHWH is perfect and symmetrical – surely everyone agrees with this.
- 3 [Ps 82:3](#) can be interpreted in two ways. I can appreciate both points of view.
- 4 These sources seem to support the Molad theory.
- 5 I can’t be certain that either the Crescent Moon or the Molad Moon were observed when Yahushua was alive.
- 6 It makes sense that a molad moon scenario fits well with Yahushua dying on a Wednesday.
- 7 There are arguments for both interpretations of this verse.
- 8 The Paleo-Hebrew meaning of “New Moon” is good evidence for the Molad theory.
- 9 The evidence from Philo, a Jewish historian, about the conjunction is strong evidence.

My Personal Conclusions

I have spent many, many hours studying the New Moon ideas, and made hundreds of records of my observations of the moon. It is clear that there are sound arguments for both the Crescent Moon and Molad theories.

While I cannot be absolutely certain which theory is correct, I personally believe that the evidence supporting the Molad theory is stronger ! The key point for me concerns the 15th day of a month – the day of the Full Moon. From my observations and research, the timing of the full moon, can rarely happen at the correct time, using the Crescent Moon theory. With the Molad theory, the timing of the full moon, can happen most of the time. Using the conjunction to determine the new moon, we will be “on time”, for our appointments with YHWH, most of the time.

In terms of determining the New Moon day, we can do this very accurately with modern technology. I personally though, make my own moon observations, and use them and a combination of the methods described above, to make sure the “published” conjunction time is accurate. I keep accurate records of my research.

Concluding Comments

I hope this study has been a blessing to you. While I have provided my own conclusions about the determination of the New Moon, I encourage the reader to do his/her own study and pray for only YHWH's truth, and only then, arrive at a decision on how to determine the New Moon day. Please check all the references I have provided in the bibliography.

I'd like to thank you for reading this study, and I pray that it will be a blessing to you. Remember, I believe what I have written is correct, but please do not believe it until you check it. I'd be interested in any feedback, positive or negative.

May YHWH continue to bless you and expand your understanding of His Word.

Shalom.

Peter Guiren

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17 November 2009

Special Note

I have enclosed a example of the records I take when determining the New Moon Day. Click the “**New Moon Day Records**” link to view it.

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