Can a Scriptural Month Have Only 28 Days?

Or Shall We Believe Jewish Tradition?

By Larry and June Acheson

As with all our studies, we encourage Bible students to think for themselves. This is a topic that has many people accepting tradition over what we feel is a Scriptural allowance. For over 25 years of Torah observance, we had never encountered a scenario like the one for Adar 2014. Is the rarity of the scenario the source of a perceived prohibition? What did the Ancients have to say?

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We are persuaded that the Scriptural month of *Adar* 2014 only consisted of 28 days. While we had often wondered if a 28-day month might be possible, it wasn't until 2014 that we found out that it is. We understand that many believers may have a difficult time accepting the possibility of a 28-day Scriptural month. This may be due to having been indoctrinated with the understanding that Scriptural months can be no shorter than 29 days and no longer than 30 days. For what is considered normative Judaism, it is an outright teaching that months can only have 29 or 30 days – no more, no less. What does Scripture say? Does Scripture make allowance for months to contain fewer than 29 days?

We all hopefully understand that within the Gregorian calendar, the month of February usually has only 28 days, but once you adopt the Scriptural calendar, you realize that Yahweh's months "apparently" must consist of at least 29 days and can never be more than 30 days long. This is because of the fact that Yahweh's months are based upon the lunar cycle, which has a duration of 29.53059 days. It would appear obvious, then, that a month must contain *at least* 29 days. Since 29.53059 is not a precise division of days, there will be months when, at the end of day #29, the new moon is sighted, thus beginning day #1 of the new month. For other months, the new moon is not visible at the end of that 29th day, so the following day automatically becomes day #30. Since the lunar cycle is so dependable, all astronomers agree that there can never be a day #31 of that cycle because the new moon is definitely there, even if it may not be seen due to cloud cover. But can there ever be a 28-day month?

Please bear in mind that under the rules of rabbinical Judaism, there cannot be a 28-day month. For those who require documentation of this fact, here is a scanned copy of the "Calendar" article from the *Encyclopædia Judaica*:[1]

Encyclopaedia Judaica, Vol 5

insistence that they took with them of the fruit of the land in order to show its excellence to the people (Num. R. 16:14). Caleb pretended to agree with the spies, so that they should permit him to address the people. When, however, he began to defend Moses, they shouted him down, as they had Joshua (Sot. 35a). As a reward for their conduct, Joshua's and Caleb's portions of the Land were determined not by lots, but by the command of God; they received the portions that had been intended for the other spies (TJBB 8:3, 16a). Caleb married Miriam (Sot. 12a) and thus became the progenitor of the house of David (Sot. 11b). He also married *Bithiah, Pharaoh's daughter—a fitting match, because she had rebelled against her father's idolatry, as he had rebelled against the spies (Lev. R. 1:3). [ED.]

Bibliography: Bright, Hist, 107n., 121, 175; Klein, in: *Me'assef Zion* 3 (1929), 1–16; Yeivin, in: *Zion*, 9 (1944), 54–60; Aharoni, Land, 224ff.; Maisler (Mazar), in: *Sefer Dinaburg* (1949), 321–5; Y. Kaufmann, *Sefer Yehoshu'a* (1959), 41–49; E. Meyer, *Die Israeliten und ihre Nachbarstaemme* (1906), passim; M. Noth, *Das System der Zwoelf Staemme Israels* (1930), 107ff.; idem, in: ZDPV, 55 (1932), 97–124; W. Rudolph, *Chronikbuecher* (1955), 10–35. IN THE AGGADAH: Ginzberg, Legends, index.

CALENDAR (Heb. לוּחַ, *luʾaḥ*). The present Jewish calendar is lunisolar, the months being reckoned according to the moon and the years according to the sun. A month is the period of time between one conjunction of the moon with the sun and the next. The conjunction of the moon with the sun is the point in time at which the moon is directly between the earth and the sun (but not on the same plane) and is thus invisible. This is known as the מוֹלָד, *molad* ("birth," from the root ילד). The mean synodic month (or lunation) is 29 days, 12 hours, 44 minutes, and 3⅓ seconds (739 parts *(ḥalakim)*; in the Jewish system the hour is divided into 1,080 parts each of which is 3⅓ seconds). The solar year is 365 days, 48 minutes, and 46 seconds, which means that a solar year exceeds a lunar one (12 months) by about 11 days. The cycles of 12 lunar months must therefore be adjusted to the solar year, because although the Jewish festivals are fixed according to dates in months, they must also be in specific (agricultural) seasons of the year which depend on the tropical solar year. Without any adjustment the festivals would "wander" through the seasons and the "spring" festival (Passover), for example, would be celebrated eventually in winter, and later in summer. The required adjustment is realized by the addition of an extra month (Adar II) in each of seven out of the 19 years that constitute the small (or lunar) cycle of the moon (*maḥazor katan* or *maḥazor ha-levanah*). In 19 years the solar cycle exceeds the lunar by about 209 days, which are approximately 7 months. In Temple times this intercalation was decided upon in the individual years according to agricultural conditions (Tosef., Sanh. 2:2; Sanh. 11b); later, however, it was fixed to be in the years 3, 6, 8, 11, 14, 17, and 19 of the cycle (see below).

In the calendar month only complete days are reckoned, the full (מָלֵא, *male*) months containing 30, and the defective (חָסֵר, *ḥaser*) months 29 days. The months Nisan, Sivan, Av, Tishri, Shevat and (in a leap year) Adar I are always *male;* Iyyar, Tammuz, Elul, Tevet, and Adar (Adar II in a leap year) always *ḥaser*, while Heshvan and Kislev vary. Hence, the common year contains 353, 354, or 355 days and the leap year 383, 384, or 385 days.

respective length of the periods of light and darkness. But in the reckonings of the *molad* the day is the equatorial day of 24 hours of unvarying length and is deemed to commence at 6 p.m., probably in terms of local Jerusalem time.

Fixing Rosh Ha-Shanah (New Year's Day). The year begins on Tishri 1, which is rarely the day of the *molad*, as there are four obstacles or considerations, called *dehiyyot*, in fixing the first day of the month *(rosh ḥodesh)*. Each *dehiyyah* defers Rosh Ha-Shanah by a day, and combined *dehiyyot* may cause a postponement of two days: (1) mainly in order to prevent the Day of Atonement (Tishri 10) from falling on Friday or Sunday, and Hoshana Rabba (the seventh day of Sukkot; Tishri 21) from falling on Saturday, but in part also serving an astronomical purpose (see below). Rosh Ha-Shanah never falls on Sunday, Wednesday, or Friday (according to the mnemonic לא אדו"ר ראש known as the postponement *addu*—probably first vocalized *iddo;* cf. Ezra 8:17). (2) Entirely for an astronomical reason, if the *molad* is at noon or later (מולד צהרים or מולד זקן) Rosh Ha-Shanah is delayed by one day or, if this would cause it to fall as above, two days. These two *dehiyyot*, owing to the mentioned limits on the number of days in the year, entail another two. (3) The third *dehiyyah* is as follows: If the *molad* in an "ordinary" (not leap) year falls at ג"שר"ד, that is the third day (Tuesday), at 9 hours, 204 *halakim*, that is, 3:11 a.m. and 20 secs.—Rosh Ha-Shanah is put off two days. A postponement to Wednesday is not permitted (as in (1)), so that it is deferred to Thursday. The object is as follows: If the *molad* of Tishri occurs at that hour, the outcome would be a year which is one day too long. The following table of *molados* will illustrate this:

Tishri	Tuesday	3:11.20	secs. a.m.
Heshvan	Wednesday	3:55.23	secs. p.m.
Kislev	Friday	4:39.27	secs. a.m.
Tevet	Saturday	5:23.30	secs. p.m.
Shevat	Monday	6: 7.33	secs. a.m.
Adar	Tuesday	6:51.37	secs. p.m.
Nisan	Thursday	7:35.40	secs. a.m.
Iyyar	Friday	8:19.43	secs. p.m.
Sivan	Sunday	9: 3.47	secs. a.m.
Tammuz	Monday	9:47.50	secs. p.m.
Av	Wednesday	10:31.53	secs. a.m.
Elul	Thursday	11:15.57	secs. p.m.
Tishri	Saturday	12: 0. 0	secs. (noon)

The last figure (Tishri) constitutes a *molad zaken* as described in (2), and this would, therefore, lead to a deferment of a day, thus making Rosh Ha-Shanah fall on Sunday, which again is not permitted, so that the festival will be moved one further day, to Monday. The interval between Rosh Ha-Shanah and the next one would then be 356 days which is a day longer than the maximum ordinary year. Rosh Ha-Shanah is therefore delayed from Tuesday to Thursday (as Wednesday is ineligible), and the result is a year of 354 days which, as distinct from the minimal year of 353 and the full one of 355 days, is called "regular" or "common." (4) This *dehiyyah* is very infrequent. It is known as בט"ו תקפ"ט אחר עבור שנה, that is when the *molad* of *Tishri*, following immediately after a leap year, occurs on the second day (Monday) at 15 hours, 589 *ḥalakim*, which means Monday, 9:32 a.m. and 43⅓ secs. If the reckoning is made backward by subtracting 13 *molados*, the Tishri of the preceding year would have had its *molad* on Tuesday at 12 noon. Having occurred at that time, Rosh Ha-Shanah of the previous year would have been on Thursday since Tuesday's *molad* was "*zaken*," and two days deferment must take place as Wednesday is impermissible. If Rosh Ha-Shanah then commenced on Thursday in the previous year, that year would have consisted of 382 days only which is too short for a leap year. By deferring Rosh Ha-Shanah of the current year from Monday to Tuesday, the year, retroactively, lasts for 383 days, which is a minimal leap year.

The Year. The "character" of the year, named *kevi'ah* (from קבע *kava*; lit., "to fix"), is indicated by two or three Hebrew

[1] From the *Encyclopædia Judaica*, vol. 5, Keter Publishing House, Jerusalem, Israel, 1971, article "Calendar," pp. 43-44.

Please notice that the *Encyclopædia Judaica* offers no options for 28-day months.

The references we have consulted all seem to concur that the Scriptural month can only consist of either 29 or 30 days. Rather than cite each of them, we will limit our range to the following quote from the *New Bible Dictionary*:

> The Hebrew calendar year was composed of lunar months, which began when the thin crescent of the new moon was first visible at sunset. The day of the new moon thus beginning was considered holy. The month (Heb. *yerah*, *moon) was reckoned to consist of 29/30 days and, since the lunar year was about 11 days less than the solar year, it was periodically necessary to intercalate a thirteenth month in order that new year's day should not fall before the spring of the year (March-April).[2]

How Do We Know Whether the Month has 29 or 30 Days?

For those who are not familiar with the lunar cycle, an explanation for how to know whether a month has 29 or 30 days is necessary. Here is what Maimonides (1135 -1204) had to say about determining whether or not a month has 29 or 30 days:

> Each month the moon disappears and becomes invisible for about two days, or somewhat more or less—for about one day at the end of the old month, before it reaches its conjunction with the sun, and for about one day after its conjunction with the sun. Then it reappears in the evening in the west, and this night, on which it becomes visible in the west after its disappearance, is the beginning of the month. From this day on, 29 days were counted, and if the new crescent appeared on the night of the 30th day, this 30th day was [declared] the first day of the *new* month. If, however, it did not appear on that night, the 30th day would belong to the *old* month and the [next day] 31st day would be [declared] the first day of the new month. And no matter whether the moon did or did not appear in the night of the 31st day, no attention was paid to it, for the lunar month never lasts longer than thirty days.[3]

Without delving into the scientific reasons for why a month cannot go beyond 30 days, Maimonides explains the general procedure to our satisfaction, and to the satisfaction of those who understand the duration of the lunar cycle. For those who do not, perhaps a more scientific explanation will prove helpful.

[2] *New Bible Dictionary*, J. D. Douglas, Organizing Editor, "Calendar," by D. J. Wiseman, Tyndale House Publishers, Wheaton, IL, 1982, p. 159.
[3] *The Code of Maimonides* (Mishneh Torah): Book 3, Treatise 8, Chapter I: "The Sanctification of the New Moon" Yale University Press, New Haven, CT, 1956, pp. 3-4.

Let's Get a Little More Scientific …

We all hopefully know that the lunar cycle lasts a little over 29½ days (29.53059 days to be more precise). Therefore, if we see the new moon crescent after sunset on a certain evening, we know it will be another 29 days before another new moon sighting can occur. What is also helpful to know is the fact that it takes somewhere between 17 to 23 hours after conjunction for a new moon crescent to become visible to the naked eye. We will need to know this information for some potential scenarios that we're going to present later in our study. If it takes at least 17 hours from the time of conjunction before a new moon can be sighted, and if a new moon conjunction happens to occur at midnight, 17 hours later would be 5:00 PM. If the new moon is still at least 7 degrees above the horizon at sunset that evening, *and* if the skies are clear, then the new moon may possibly be seen that evening. *How do we know that we should wait 17-23 hours after the conjunction before looking for the new moon?* The answer to this question requires more than a brief explanation. The answer can be found in scientific textbooks and some internet web sites are also helpful.

Here is some helpful information from www.moonsighting.com:[4]

> **2.1 Question: After the Moon Birth, how much time is required for people to sight the New Moon?**
>
> **Answer:** Time passed after New Moon Birth is called the age of the moon. Sighting is possible at different age in different months. So, age cannot be a criterion for sighting. Why is it so? Because the orbit of the moon is elliptical and in its orbit, the moon moves faster when it is closer to the earth, and slower when it is farther from earth. When it moves faster, the moon becomes visible at smaller age (like 17 hours), and when it moves slower, it becomes visible at larger age (like 23 hours). The main factor that makes the moon visible is the angle between moon-earth-sun. When this angle becomes about 9 degrees, the moon starts to be visible. How much time it takes to get this angle depends upon the speed of the moon in its orbit.
>
> **2.4 Question: What is the "scientific" basis for the apparently accepted view that the moon cannot be sighted with naked eye if it younger than 13 hours or so? (Dec 24, 1998)**
>
> **Answer:** Scientific basis is that in 13 hours, the angular separation of the moon from sun is between 7.2° to 8.5°. The angular separation (elongation) is the most important factor in moon's visibility besides several other factors combined. At the angle 7°, no sunlight reflected from the moon can come to the earth, meaning that the crescent is not formed to see from earth (this is due to the mountains on the surface of the moon that block the sunlight coming to the earth - Danjon effect). Between 7.2 and 8.5°, the crescent is invisible to the eyes because the brightness of this thin crescent is less than the sky brightness on the horizon. At elongation less than about 7.5°, even

[4] The information cited here is taken from Moonsighting.com's website: http://www.moonsighting.com/faq_ms.html. Caution: This is an Islamic web site. Although our religious views are obviously different, we do respect their skills when it comes to sighting the new moon.

telescopes do not pick up the thin crescent. This is the discussion for naked eye versus telescope or binocular sightings.

The published record for moonsighting with bare eyes shows that no one has ever seen the crescent of less than 15.4 hours old [see "Records of Young Moon Sightings, Quarterly Journal of Royal Astronomical Society (1993) 34, 53-56, article by Schaefer, Ahmad, and Doggett]. This sighting was done on Sep 14, 1871 CE. The angular separation was 9.3°. That was in the previous century, when atmospheric pollution and city light pollution did not exist. Now it is not possible to see even this kind of crescent. In recent times the crescent that has been seen with naked eye had the angle of 10.5° which corresponds to 17 to 21 hours of age. Remember, even 17 to 21 hours' age does not mean that every moon of this age will be visible. There are other factors that must meet the certain minimum criteria for a crescent to be visible.

Here's how complicated this can become if we aren't careful:

9.3 Question: After looking at your website, I started fasting on December 31 1997 in Detroit Michigan. On the evening of December 31, I was able to see the new moon even at 7:15pm in Detroit Michigan. I have got a shareware software (CyberSky). According to this software, at 7:15pm the moon was about 5° above the horizon in Detroit Michigan [Larry's note: According to our Skyglobe software, the new moon's altitude was at 21.35° at sunset over Detroit, MI on 12/31/1997]. The point is, I think one can see the moon at 5° above the horizon, which your software (on the web MOONCALC 4.0) does not take into account for global moon sighting. Now I checked the software for the evening of December 29 1997. According to the results of this software, the moon was at 5° above the horizon after sunset in Detroit, Michigan [Larry's note: According to our Skyglobe software, the new moon's altitude was at 3.48° at sunset on 12/29/1997]. This makes me wonder how no one of you was able to see the moon in North America on December 29, 1997. For eid according to the software results the moon will be about 10° above the horizon in Detroit Michigan on January 28, 1997, so we should be able to see it easily which moonCalc 4.0 does not predict. (Jan 3,1998)

Answer: The moon-sighting prediction calculations are not that simple as you think. If the moon surface facing the earth is completely dark and the moon is above 5° or 10°, or even 20° it means it is there but is invisible. 5 or 10° above horizon is a function of curvature of the globe. But for visibility, the moon has to reflect sun's light. To do that the moon has to be at about 10° angle minimum from the sun (this angle is also called elongation, or arc of light). Elongation was 5.2° in Detroit on Dec. 29; that is why you did not see the moon on that day. On Jan 28, you will still not see the moon because the elongation is less than 10° **[Larry's note: According to Skyglobe software, the new moon crescent's altitude was at 7.49° at sunset on 01/29/1998]**, and the age is 17 hours, and there are other parameters of the moon that make it impossible to see it on Jan 28. However, on Jan 29, you will see a big moon that is 41 hours old; that still does not mean that it

was yesterday's moon, because yesterday it was 17 hours old and was not visible in your area or on the east coast of USA.

The above information may be overly-scientific and even boring to many of us, but if nothing else we hope you're able to better understand the many variables that either prevent or allow sighting a new moon. Moreover, we hope you understand that if the moon has not reached at least 17 hours of age from the conjunction stage by sunset, you will most likely not be able to see it. Let's move on and take a look at a couple of potential "sunset scenarios" to get an even better idea of how the principles involved in new moon sighting are applied.

Let's Get Hypothetical …

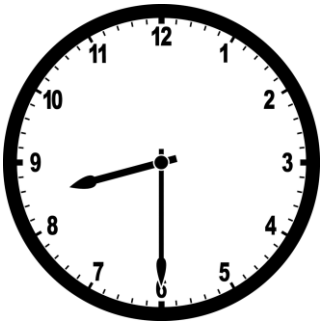
We hope the above information validating the need to allow at least 17 hours from conjunction to expect a new moon sighting was helpful to you. If we now have the understanding to allow a minimum of 17 hours from conjunction to look for the new moon, we can proceed with the following hypothetical scenario. Let's say that day #28 has ended, then at midnight on day #29 the conjunction occurs. Seventeen hours later (5:00 PM), the crescent becomes "sightable" (*if* the sun sets at or near 5:00 PM, and *if* the new moon is at least 8 degrees above the horizon at sunset, *and* if the skies are clear).

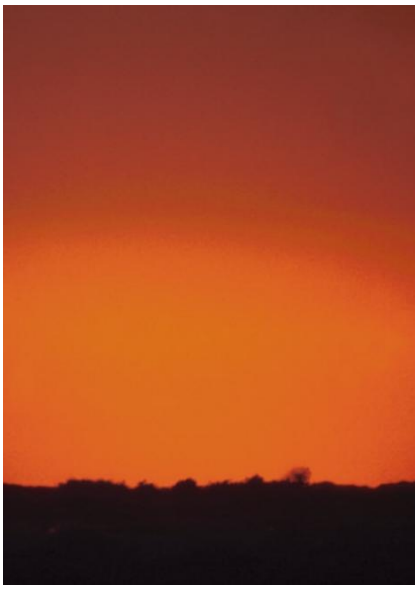
Moon is at least 17 hours old & at least 7° above the horizon by sunset as day #29 ends:

The above scenario presumes that the sun sets at 5:00 PM on day #29 and the new moon becomes visible a half hour after sunset. In this scenario, day #1 of the new month has officially begun and the old month had 29 days. But what if the sun sets *later* than 5:00 PM? What happens when the sun sets at 8:00 PM? Will that new moon crescent be visible when day #29

comes to an end? The answer is no because the moon will have already set by 8:00 PM (it probably set by 6:00 PM) and prior to sunset, the sun so outshone the moon that it was not visible. The following illustration depicts what conditions one should expect if the moon sets at 6:00 PM and the sun sets at 8:00 PM. With the understanding that you need to generally wait a half hour after sunset to see a new moon crescent, here is what you would expect to see in the western sky at 8:30 PM:

What Happened to the New Moon Crescent?





By 6:00 PM on day #29, the new moon crescent had already set. Before it set, the sun outshone it so much that it was simply not visible. Thus, we have no choice but to add an extra day to the month. It is a 30-day month.

Now if the conjunction that occurred just prior to our current month occurred precisely at midnight (12:00 AM), this means that the next month's conjunction will occur 29.53059 days later (i.e., 29 days, 12 hours, 44 minutes later). In other words, the next month's conjunction occurs at 12:44 PM. The following month's conjunction would occur at 1:28 AM, then the following month's conjunction would occur at 2:12 PM. As you can hopefully see, the dynamics change with each passing month! It's never the same! *Is this Yahweh's way of keeping us "on our toes"?*

Can Yahweh Produce a 28-Day Month?

With all the constantly-changing dynamics affecting our ability to sight a new moon, is it possible that Yahweh could present us with a month that only contains 28 days? We had never experienced such a phenomenon before, and even though we had often considered the possibility, at the same time we never really gave it much thought … until 2014! Let's take a look at a potential scenario that can occur, given the fact that the lunar

cycle is 29.53 days long and *generally-speaking*, the new moon crescent really needs to be at least 17 hours old before it can be seen:

Potential Scenario That Can Occur

RANDOM MOON

FIRST DAY	SECOND DAY	THIRD DAY	FOURTH DAY	FIFTH DAY	PREPARATION	SABBATH
			28	29 Conjunction occurred at 3:00 AM **Sun Set 8:05 pm**	30 The sun set at 8:05 PM on day #29 & the crescent had just turned 17 hours old a few minutes earlier (8:00 PM). "Close, but no cigar."	1 **Sun Set: 8:07 pm**
2	3	4	5	6	7 **Sun Set: 8:11 pm**	8 **Sun Set: 8:12 pm**
9	10	11	12	13	14 **Sun Set: 8:16 pm**	15 **Sun Set: 8:17 pm**
16	17	18	19	20	21 **Sun Set: 8:21 pm**	22 **Sun Set: 8:22 pm**
23	24	25	26	27	28 **This is day#29 After conjunction + 12 hrs, 44 min. = new conjunction at 3:44 PM**	29 **17 hrs later = 8:44 AM today! New Moon will be seen tonight unless it's cloudy). The New Moon crescent is over 28 hours old at sunset.**

The above calendar illustrates that by sunset on day #29, the new moon crescent is over 28 hours old. We have already established that a crescent moon needs to be at least 17 hours old to be seen after sunset. If the weather conditions are clear that evening, the new moon should be easily visible. ***But what if it's cloudy on day #29?*** The following calendar is identical to the one above, but it exhibits a different variable on day #29:

SAME RANDOM MOON, BUT CLOUDY!

FIRST DAY	SECOND DAY	THIRD DAY	FOURTH DAY	FIFTH DAY	PREPARATION	SABBATH
			28	29 Conjunction occurred at 3:00 AM	30 The sun set at 8:05 PM on day #29 & the crescent had just turned 17 hours old a few minutes earlier (8:00 PM). "Close, but no cigar."	1 Sun Set: 8:07 pm
2	3	4	5	6	7 Sun Set: 8:11 pm	8 Sun Set: 8:12 pm
9	10	11	12	13	14 Sun Set: 8:16 pm	15 Sun Set: 8:17 pm
16	17	18	19	20	21 Sun Set: 8:21 pm	22 Sun Set: 8:22 pm
23	24	25	26	27	This is day 28 #29 after con-junction + 12 hrs, 44 min. = new conjunction at 3:44 PM	29 17 hrs later = 8:44 AM today! New Moon would have been sighted after sunset, BUT it was CLOUDY! New Moon crescent was over 28 hours old at sunset.
30 New moon is now over 52 hours old by sunset!						

Since we were obligated to add an additional day to the above month, how does that affect the following month? Here is the potential calendar for the following month:

RANDOM NEXT MOON

FIRST DAY	SECOND DAY	THIRD DAY	FOURTH DAY	FIFTH DAY	PREPARATION	SABBATH
	1 Day #3 after the conjunction	2	3	4	5 Sunset: 8:30 pm	6 Sunset: 8:31 pm
7	8	9	10	11	12 Sunset: 8:34 pm	13 Sunset: 8:35 pm
14	15	16	17	18	19 Sunset: 8:37 pm	20 Sunset: 8:37 pm
21	22	23	24	25	26 (3:44 PM + 12:44 = 4:28 AM) Sunset: 8:39 pm	27 Day #29 after Conjunction + 12 hrs, 44 min. = 4:28 AM. It becomes 17 hours old at 9:28 PM. Sunset: 8:39 pm
28 By 8:40 PM, the crescent is over 30 hours old! It should be seen after sunset!	29	30				

Now that we've shown a *potential* scenario, let's take a look at what actually occurred in 2014.

What Happened in Adar 2014?

We earlier established that normative Judaism teaches that a Scriptural month cannot be shorter than 29 days. This teaching was brought to the forefront in April 2014 by a member of the Israeli New Moon Society. We will supply his explanation and defense of this teaching later. For now, let's examine how a 28-day month actually occurred in the year 2014.

Before we display the 28-day month scenario of 2014, let us first establish that if weather conditions were always clear on the 29th day of each lunar month, there would never be a 28-day month. However, what happens if, at the end of day 29 – a day on which it is all but certain that the new moon will be visible after sunset – a thick blanket of clouds envelops the entire region instead? If the new moon is not visible that evening, even though it was all but certain that it would have been, do you go ahead and declare the new month in spite of the fact that there were not two witnesses to confirm a sighting? Or do you regard the blocked view as Yahweh's way of telling you He isn't yet ready for us to declare a new month?

As for June and me, we opt for the latter option. Our aim is to allow *Yahweh* to guide every aspect of our lives and we choose to allow *Him* (not men) to guide us in the direction of determining when a new month begins. If we recognize Yahweh as being in control, we know first-hand that He can part the clouds so as to allow the sighting of His new moon. With as many sightings as we have seen over the years, June and I have witnessed more than a few unconventional sightings, including a teeny window in the clouds that offers just enough room for a new moon to fit. We have even observed a new moon in the middle of a thunderstorm. On still other occasions, even though we were confident there would be a sighting, we were nevertheless unable to spot the crescent moon under clear skies.

As we hope you understand, we are persuaded that Yahweh doesn't want His children determining His months based on new moon crescents that "should have been seen." In fact, even Judaism recognizes that declaring a 29-day month can only be done with the testimony of two witnesses. This understanding is based on the fact that in Exodus 12:1-2, Yahweh showed two witnesses (Moses and Aaron) what the first new moon of the year looked like:

> [1] And Yahweh spake unto Moses and Aaron in the land of Egypt, saying,
> [2] This month (Hebrew *chodesh*, new moon) shall be unto you the beginning of months: it shall be the first month of the year to you.

It is ironic that Judaism recognizes from Exodus 12:1-2 that the Almighty set a precedent that a new month should not be declared without the testimony of at least two witnesses. Given the fact that, by default a month cannot contain more than 30 days, if it is found to only have 29 days, that finding must be on the basis of at least two witnesses testifying to its having been sighted. Shown below is an excerpt of the commentary on Exodus 12:1 from the Jewish commentary on the Torah known as *The Chumash*:

> The Torah provides that Rosh Chodesh can be proclaimed only by the rabbinic court, on the basis of two witnesses who testify that they observed the re-appearance of the moon.[5]

If the new moon (Rosh Chodesh) can only be proclaimed on the basis of two witnesses, and if there is no need for witnesses after a 30-day month, then on what basis does modern Judaism contradict the above teaching and declare that a certain month was a 29-day month, even though there were no witnesses who sighted the new moon crescent? Nevertheless, as we will see later in our study, that is precisely what Judaism does and this is what they did to the Scriptural month of *Shebat* 2014.[6] It is with this backdrop that we would like to present our view that the Scriptural 12th month of Adar 2014 (which encompassed March 2014) was a 28-day month.

Before the month of *Adar* had even arrived, we had already projected that the 11th month (*Shebat*) would be a 29-day month based on the fact that the new moon crescent's altitude over Israel was expected to be at over 16 degrees above the horizon at sunset on that 29th day (March 2nd). Generally, it is possible to see a new moon that is at an altitude of 7 degrees or higher above the horizon at sunset. Of course, a new moon is not actually visible right at sunset, but if the new moon is at least 7 degrees above the horizon at sunset, you have a fairly good opportunity of seeing it within the next half hour or so. We say this even though we cannot confirm having ever sighted a new moon crescent whose altitude was at the 7° range at sunset. While various ones have claimed to have sighted the new moon crescent at 7°, the best we can boast is an 8° new moon crescent. If there are clear viewing conditions and the New Moon crescent is at 10 degrees or higher, it's usually a given, though not a certainty, that it will be seen. A 16-degree new moon, then, is a near certainty – *unless it's cloudy*. With the understanding that a 16-degree New Moon would all but guarantee a sighting at the end of day #29, here is the potential calendar scenario that June and I put together for the 11th month:

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[5] From *The Chumash: The Stone Edition*, by Rabbi Nosson Scherman, Mesorah Publications, Ltd., Brooklyn, NY, 1997, rabbinic commentary on Exodus 12:1, p. 349.

[6] It may be helpful at this juncture to explain that, according to our reasoning, the 11th month of the Scriptural year (*Shebat 2014*) fell between February 2nd and March 2nd. This is because we did not begin the Scriptural year until after the vernal equinox of 2013. For Judaism, the time period in question fell during the 12th Scriptural month of *Adar* because they began the Scriptural year before the vernal equinox of 2013. If you would like more information outlining why we are persuaded that the Scriptural year should begin after the vernal equinox, please read our studies *Balancing the Calendar* and *Balancing the Calendar II*.

SHEBAT ELEVENTH MOON 2014

FIRST DAY	SECOND DAY	THIRD DAY	FOURTH DAY	FIFTH DAY	PREPARATION	SABBATH
1 February 2	2 February 3	3 February 4	4 February 5	5 February 6	6 Sunset: 6:04 pm February 7	7 Sunset: 6:05 pm February 8
8 February 9	9 February 10	10 February 11	11 February 12	12 February 13	13 Sunset: 6:10 pm February 14	14 Sunset: 6:11 pm February 15
15 February 16	16 February 17	17 February 18	18 February 19	19 February 20	20 Sunset: 6:17 pm February 21	21 Sunset: 6:17 pm February 22
22 February 23	23 Februar				27 et: 6:22 pm ruary 28	28 Moon = 8.29° (Plano, TX) Moon = 3.41° (Jerusalem) Sunset: 6:23 pm March 1
29 Moon = 21.38° (Plano, TX) Moon = 16.54° (Jerusalem) Sunset: 6:24 pm March 2						Sunset times based upon local time in Plano, Texas USA

We projected a 29-day month.

When March 2nd (day #29) arrived, we fully expected to hear a report from Israel that the new moon had been sighted; however, here is the report that we received from the Israeli New Moon Society:

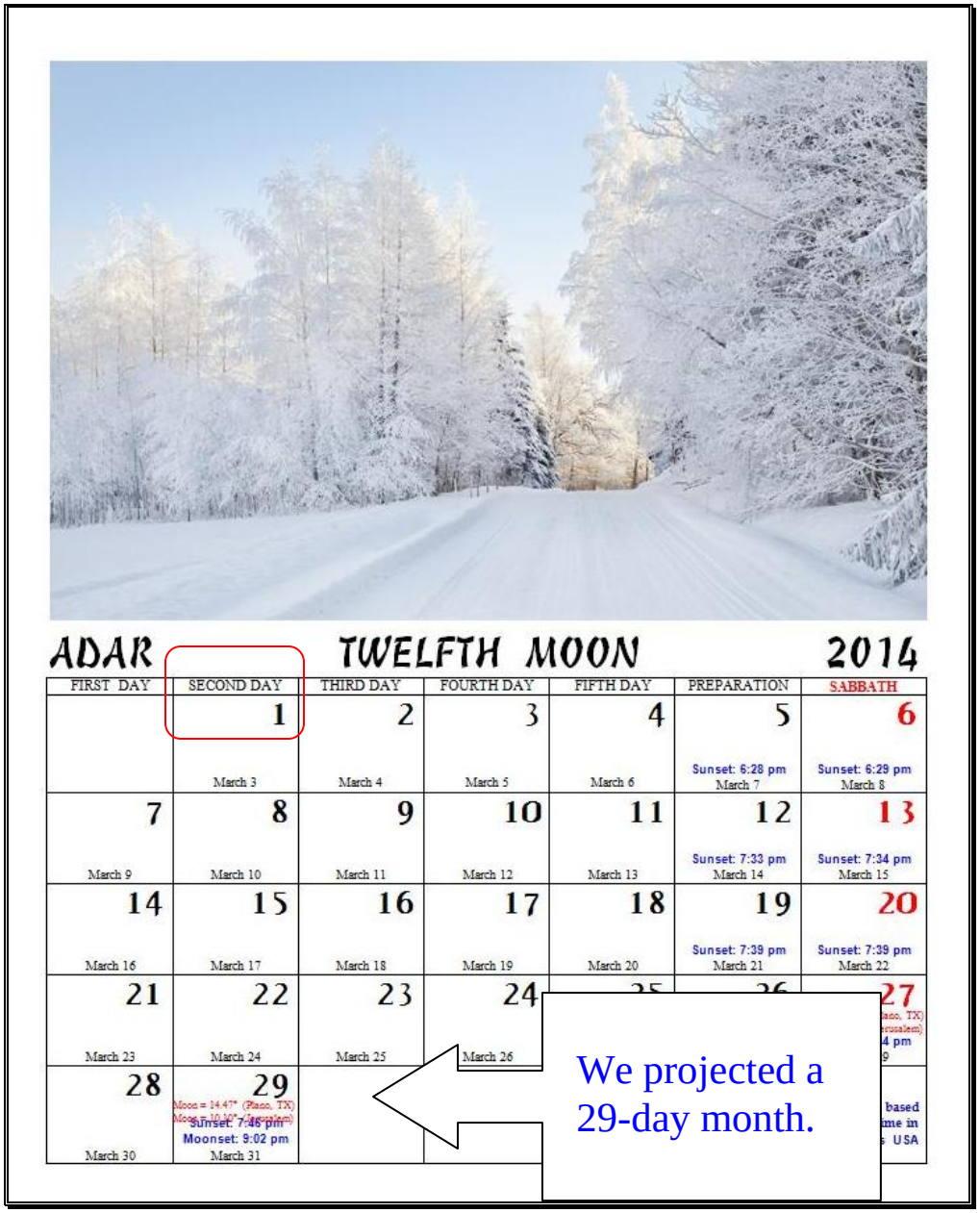
> It was impossible to see the new moon from Israel as the entire country suffers from dust and sand clouds.

Even though the 16-degree New Moon was expected to be seen by man, the Almighty had other plans. By default, the 11th month became a 30-day month and we had to update our calendar:

SHEBAT ELEVENTH MOON 2014

FIRST DAY	SECOND DAY	THIRD DAY	FOURTH DAY	FIFTH DAY	PREPARATION	SABBATH
1 February 2	2 February 3	3 February 4	4 February 5	5 February 6	6 Sunset: 6:04 pm February 7	7 Sunset: 6:05 pm February 8
8 February 9	9 February 10	10 February 11	11 February 12	12 February 13	13 Sunset: 6:10 pm February 14	14 Sunset: 6:11 pm February 15
15 February 16	16 February 17	17 February 18	18 February 19	19 February 20	20 Sunset: 6:17 pm February 21	21 Sunset: 6:17 pm February 22
22 February 23	23 February 24	24 February 25	25 February 26	26 February 27	27 Sunset: 6:22 pm February 28	28 Moon = 5.29° (Plano, TX) Moon = 3.41° (Jerusalem) Sunset: 6:23 pm March 1
29 Moon = 21.38° (Plano, TX) Moon = 16.54° (Jerusalem) Sunset: 6:24 pm March 2	30					Sunset times based upon local time in Plano, Texas USA

When we made up the calendar scenario for the next month (the 12th month *Adar*), we knew things might get dicey at the end because we had already projected it as being a 29-day month while the 11th month was still in progress! The calendar we had anticipated for *Adar* is displayed below. As you can see, it was all set to begin on the 2nd day of the week, based on our guesstimated projection:



As displayed above, our projected calendar for the Scriptural month Adar 2014 was *expected* to begin on the second day of the week and it was expected to have 29 days. If the new moon of the previous month had been sighted on the evening of March 2nd, everything would have gone as planned. However, it was *not* sighted that evening, automatically making the 11th month a 30-day month and we had to completely overhaul our anticipated calendar for *Adar*. Instead of beginning on the second day of the week, Adar began on the *third* day of the week. This effectively messed up our projections for the month of Adar. What follows is an illustration of the messed-up calendar:

ADAR TWELFTH MOON 2014

FIRST DAY	SECOND DAY	THIRD DAY	FOURTH DAY	FIFTH DAY	PREPARATION	SABBATH
	~~1~~ March 3	1 ~~2~~ March 4	2 ~~3~~ March 5	3 ~~4~~ March 6	4 ~~5~~ Sunset: 6:28 pm March 7	5 ~~6~~ Sunset: 6:29 pm March 8
6 ~~7~~ March 9	7 ~~8~~ March 10	8 ~~9~~ March 11	9 ~~10~~ March 12	10 ~~11~~ March 13	11 ~~12~~ Sunset: 7:33 pm March 14	12 ~~13~~ Sunset: 7:34 pm March 15
13 ~~14~~ March 16	14 ~~15~~ March 17	15 ~~16~~ March 18	16 ~~17~~ March 19	17 ~~18~~ March 20	18 ~~19~~ Sunset: 7:39 pm March 21	19 ~~20~~ Sunset: 7:39 pm March 22
20 ~~21~~ March 23	21 ~~22~~ March 24	22 ~~23~~ March 25	23 ~~24~~ March 26	24 ~~25~~ March 27	25 ~~26~~ Sunset: 7:44 pm March 28	26 ~~27~~ Moon = 5.29° (Plano, TX) Moon = 3.41° (Jerusalem) Sunset: 7:44 pm March 29
27 ~~28~~ March 30	~~28~~ 29 Moon = 14.47° (Plano, TX) Moon = 10.42° (Jerusalem) Sunset: 7:48 pm Moonset: 9:02 pm March 31					Sunset times based upon local time in Plano, Texas USA

Having *Adar* begin on the third day of the week (instead of the originally-projected second day) was the least of our calendar concerns. You see, we *still* expected to see the next new moon on March 31st, and if such would be the case, *Adar* would be a 28-day month! We had never heard of (or observed) such a thing!

Of course, at the *beginning* of Adar, we had no idea what would happen at the *end* of the month. Would it only have 28 days or were we missing something? I decided to ask our contact person with the Israeli New Moon Society if he thought there might be a 28-day month. Here is his reply:

> No, There can't be 28 days and after 30 days even if the moon is not seen, a new month begins.

In view of the fact that Scripture does not come out and tell us there cannot be 28 days in a month, I felt that the above was a rather smug response, especially in view of the fact that the representative didn't offer an explanation. *How could he be so sure that there cannot possibly be*

28 days in a month? Nevertheless, instead of challenging the representative, we decided to just wait and see what would happen at the end of the month. We knew that if the new moon was sighted on March 31st, *Adar* would have to be considered a 28-day month and with such a sighting, we would need a better explanation from our friend at the Israeli New Moon Society. On the other hand, if it was sighted on April 1st, Adar would be a 29-day month and I would have no further questions, nor would there be a need to compose this study!

We eagerly awaited the big day of March 31st. I had to work that day, but I was hopeful to have an opportunity to check my personal e-mail account over my lunch hour to see if there was any report from the Israeli New Moon society about a new moon sighting. To my dismay, I kept so busy that it wasn't until I left work that I was able to see confirmation that YES! The new moon had been sighted over Israel by multiple witnesses! *Adar* was over and it had been a very, very rare 28-day month! Here's the calendar I was now compelled to put together:

ADAR **TWELFTH MOON** **2014**

FIRST DAY	SECOND DAY	THIRD DAY	FOURTH DAY	FIFTH DAY	PREPARATION	SABBATH
	New moon was not sighted over Israel on 03/02/14 (dust/sand clouds).	1 March 4	2 March 5	3 March 6	4 Sunset: 6:28 pm March 7	5 Sunset: 6:29 pm March 8
6 March 9	7 March 10	8 March 11	9 March 12	10 March 13	11 Sunset: 7:33 pm March 14	12 Sunset: 7:34 pm March 15
13 March 16	14 March 17	15 March 18	16 March 19	17 March 20	18 Sunset: 7:39 pm March 21	19 Sunset: 7:39 pm March 22
20 March 23	21 March 24	22 March 25	23 March 26	24 March 27	25 Sunset: 7:44 pm March 28	26 Moon = 8.29° (Plano, TX) Moon = 3.41° (Jerusalem) Sunset: 7:44 pm March 29
27 March 30	28 Moon = 14.47° (Plano, TX) Moon = 10.30° (Jerusalem) Sunset: 7:46 pm Moonset: 9:02 pm March 31		New moon was sighted over Israel on 03/31/14 by two witnesses, resulting in a 28-day month.			Sunset times based upon local time in Plano, Texas USA

We need to emphasize that in over 25 years of Torah observance, June and I had never experienced a 28-day month. Nevertheless, in spite of how rare this situation may be, it's a wonder it hasn't occurred more often because it can certainly happen any time there are two consecutive (projected) 29-day months, but it is cloudy on the 29th day of the *first* of those two months.

It is not at all uncommon to have two consecutive Scriptural months of 29 days. In fact, there were two consecutive 29-day months in November and December 2013, only three months prior to the situation that I have just described. It is a given that if there is a 29-day month, the moon must have been sighted; otherwise the month automatically becomes a 30-day month. However, let's suppose for a moment that it had been cloudy on day #29 of the Scriptural month of *Bul* (in November 2013, displayed below). This would have required that the new month of *Casleu* (in December 2013) begin a day later and instead of having 29 days, that month would have had only 28 days:

BUL EIGHTH MOON 2013

FIRST DAY	SECOND DAY	THIRD DAY	FOURTH DAY	FIFTH DAY	PREPARATION	SABBATH
Sunset times based upon local time in Plano, Texas, USA			1	2	3	4
			New moon 6	New moon 7	Sunset 6:30 pm New moon 8	Sunset 6:30 pm New moon 9
5	6	7	8	9	10	11
New moon 10	New moon 11	New moon 12	New moon 13	New moon 14	Sunset 6:26 pm New moon 15	Sunset 6:26 pm New moon 16
12	13	14	15	16	17	18
New moon 17	New moon 18	New moon 19	New moon 20	New moon 21	Sunset 6:22 pm New moon 22	Sunset 6:22 pm New moon 23
19	20	21	22	23	24	25
New moon 24	New moon 25	New moon 26	New moon 27	New moon 28	Sunset 6:20 pm New moon 29	Sunset 6:20 pm New moon 30
26	27	28 Moon = 11:41 (Greenwich) Moon = 21.39° (Delta T) Moon = 14.09° (Jerusalem) Sunset 6:20 pm Moon set 6:24 pm	29 Moon = 21.39° (Delta T) Moon = 14.09° (Jerusalem) Sunset 6:20 pm Moon set 7:30 pm			
December 1	December 2	December 3	December 4			

CASLEU NINTH MOON 2013-14

FIRST DAY	SECOND DAY	THIRD DAY	FOURTH DAY	FIFTH DAY	PREPARATION	SABBATH
Sunset times based upon local time in Plano, Texas, USA				1	2	3
				December 5	Sunset 6:20 pm December 6	Sunset 6:20 pm December 7
4	5	6	7	8	9	10
December 8	December 9	December 10	December 11	December 12	Sunset 6:21 pm December 13	Sunset 6:23 pm December 14
11	12	13	14	15	16	17
December 15	December 16	December 17	December 18	December 19	Sunset 6:23 pm December 20	Sunset 6:24 pm December 21
18	19	20	21	22	23	24
December 22	December 23	December 24	December 25	December 26	Sunset 6:27 pm December 27	Sunset 6:28 pm December 28
25 Hanukkah begins	26	27	28 Moon = 20.03° (Delta T) Moon = 15.35° (Jerusalem) Sunset 6:31 pm Moon set 6:14 pm	29 Moon = 20.03° (Delta T) Moon = 15.35° (Jerusalem) Sunset 6:31 pm Moon set 7:24 pm		
December 29	December 30	December 31	January 1	January 2		

The above potential scenario became a reality with the dust and sand clouds that enveloped Israel on the evening of March 2, 2014 (the 29th day of the Scriptural month), which automatically made the 11th Scriptural month of *Shebat* a 30-day month and caused the 12th month of *Adar* to begin on March 4, 2014. With the next new moon sighting coming 28 days later, I could only conclude that *Adar* was a 28-day month. I decided that it was time to bring this matter to the attention of the Israeli New Moon Society. Here's an excerpt from the e-mail I sent the representative:

> Fast forward to March 2, 2014, which was day #29 of the Scriptural month. The new moon should have been sighted over Israel [that evening], but was not due to dust and sand clouds. By default, it became a 30-day month [March 3rd being day #30] and March 4th was day #1 of the new month.
>
> Twenty-eight days later, on March 31st, the new moon was sighted over Israel, making April 1 the first day of the new Scriptural month. For those who strictly go by the Israel sightings, last month was a 28-day month. I'm attaching a calendar that I hope sufficiently illustrates my understanding and the explanation that I have just given you.
>
> I understand that I saw the new moon back on March 2nd, but I try to think in terms of ancient ways and the old paths (Jer. 6:16) and I know that under these same circumstances in ancient times no one outside of Israel would have been able to report sighting the new moon in time for the proper reckoning to begin. I also question whether such far-away testimony would have been accepted in the amount of time it would have taken to provide the report.
>
> Since the ancient understanding was that the new month is reckoned based on visual sighting, combined with the fact that a new moon was sighted 28 days after a 30-day month, I am persuaded that last month was a 28-day month. I might add that nowhere in Scripture does it ever state that a month may only consist of 29 or 30 days.
>
> If you can supply evidence disproving my reasoning above, I would like to read it.

Clearly, based on the fact that, by default, the 11th month of *Shebat* was a 30-day month due to non-sighting of the new moon at the end of day #29, the following month of *Adar* was denied its projected 29-day billing and only lasted 28 days before the next new moon sighting. Nevertheless, Jewish tradition keeps the Israeli New Moon Society from recognizing the possibility of a 28-day month. Here is the representative's response to my e-mail:

> Hi Larry. There are special laws in the Jewish calendar to make sure that such scenarios will not happen. The basic idea is that if it will be possible to see the moon in the next month after 29 days, the Bet-Din will decide the 30th day as the first day of a new month even if there were not any witnesses. Otherwise there might be a sequence of months that due to clouds/haze or just bad luck the moon will not be seen and suddenly it will appear in the 27 day or so.... It is detailed in the Rambam laws chapter 18-19.

When we read the above response, we knew the discussion was over because we have long understood that Jewish reverence for Rambam (Maimonides) will trump any reasoning that we might present to the contrary. Did Maimonides write that a month may not consist of fewer than 29 days in his work "The Sanctification of the New Moon"? Yes, he did (in so many words). Here is the pertinent portion of his commentary:

> For 29 complete days must always elapse from the night of visibility of one new moon until the night of visibility of the next new moon. The same is true of all months: each has neither less nor more than 29 days.[7]

There is an immediate problem with the above commentary: Contrary to what Maimonides wrote above, some months do indeed have more than 29 days, i.e., they can have 30. In fact, he contradicts this testimony elsewhere in his writings, as we read early in our study. Nevertheless, the fact remains that Maimonides wrote that a month cannot contain *fewer* than 29 days, which in turn means that he would not have recognized the month we regard as having had 28 days. Maimonides elaborates on his reasoning in chapter 18 of his work:

> 5. (Consider now the following case:)
> (i) Witnesses who had observed the new crescent in its "proper time" came and testified, and the court accepted their testimony and sanctified the new moon, this being the first New Moon Day (in the case before us).
> (ii) Then, starting with the thus sanctified New Moon Day, 29 days were counted, but on the night of the 30th day the new crescent was not visible, either because it could not possibly have been visible or because it was hidden behind clouds. As a result, the court remained in session all of the 30th day, as explained above (1, 6), waiting for witnesses to arrive; but since no witnesses did arrive, the month was declared to be full, and accordingly, New Moon Day—the second (in the present example)—was set on the 31st day, as we have explained (1, 3).
> (iii) Now the court began again to count 29 days, starting from the second New Moon Day, and again the new crescent was not visible on the night of the 30th day. Should we therefore contend that the month is once more to be declared full, that is, made to consist of 30 days, and that this, the third, New Moon Day also is to fall on the 31st day? <u>If so, it may well happen that, even in this month, the new crescent will remain invisible on the night of the 30th day, and the court might thus find itself compelled to continue declaring full months of 30 days throughout the year and, consequently, the new crescent might in a subsequent month become visible on the night of the 25th or the 26th day—than which nothing could be more ludicrous and confusing</u>.[8]

Maimonides goes on to write that it is not at all improbable that cloudy weather conditions would continually prohibit sighting the new moon on the night of the 30th day (as the 29th has ended), and that these same conditions could prevail for several consecutive months, including a full year's worth of months. Theoretically-speaking, we cannot argue against such a potential scenario, even though we have yet to experience anything remotely similar to what occurred this year in over 25 years of watching for the new moon crescent.

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[7] *The Code of Maimonides* (Mishneh Torah): Book 3, Treatise 8, Chapter XII: "The Sanctification of the New Moon" Yale University Press, New Haven, CT, 1956, p. 47-48.
[8] Ibid, chapter XVIII, p.75.

A Year of Clouds?

Maimonides' potential scenario presents an intriguing dilemma. How would a year of clouds on the 29th day of each Scriptural month affect the following month's new moon sighting? I checked the calendar we maintained for a 12-month period beginning with the New Moon Day of January 14, 2013 to see what a year's worth of cloudy conditions would have done. Actually, we had anticipated New Moon Day falling on January 13, 2013, but the new moon was not sighted at the conclusion of the previous month's 29th day, making it by default a 30-day month. The Biblical 11th month of *Shebat* thus began on January 14th of the Gregorian calendar. Presuming that it also would have been cloudy at the conclusion of day #29 of the next 12 months, we determined that the month of *Shebat* in 2014 would have been a 24-day month. Actually, it would have been a 23-day month, but that evening (March 2, 2014) was the infamous night of the dust and sand clouds enveloping Israel, which we referenced earlier. To add even more intrigue to this scenario, if we take this year's dust and sand clouds phenomenon into consideration with the following month, including the new moon sighting of March 31, 2014, the month of *Adar* would have only consisted of 22 days!

Given the fact that Scripture never specifies whether or not a month can consist of fewer than 29 days, I think the big question that each of us must answer is, "How shocking would it be to you if a certain month only consisted of 22 days?" From our perspective, it would be little more than a novelty. For others, it is apparently the "unthinkable." Either way, once the unusual scenario is behind us, we move on and the next month will either contain 29 or 30 days as usual. In 2014, the month following the unusual 28-day month contained 30 days, not because it was cloudy at the close of day #29, but the new moon crescent was far too low above the horizon at sunset (3.25°) for anyone to have possibly been able to see it. We can now look back at the 28-day month of Adar and either chuckle or scratch our heads in disbelief, but the fact of the matter is, a new moon was sighted over Israel 28 days after a full 30-day month had previously been declared. From Maimonides' perspective, the mere thought of such a short month is "ludicrous and confusing," and since he is such a revered sage within normative Judaism, modern Judaism will accept his testimony regardless of the fact that Scripture never draws such a boundary regarding the length of a month.

When it comes to the writings and commentary of any man, including yours truly, we really need to ask, "By whose authority did he write it? Man's or Yahweh's? Does what he wrote agree with Scripture?" Does Maimonides' rejection of a 28-day month have Scriptural support? As we evaluate the answer to that question, we are compelled to state unequivocally that Maimonides took some liberties with new moon sanctification that we cannot believe had Yahweh's blessing. For example, here is what he wrote in chapter two of his treatise "Sanctification of the New Moon":

> Even if the court itself and the whole community of Israel had observed the new moon, as long as the court [of the Sanhedrin] had not pronounced the Měkuddaš formula (*Měkuddaš* means "the new moon has been sanctified") before the arrival of darkness on the night of the 31st day—if only because the examination of the witnesses had dragged on for so long that the court had no occasion to pronounce Měkuddaš before the arrival of darkness on the night of the 31st—this new moon could no longer be sanctified and the

> old month was declared embolismic [i.e., "full," having 30 days]. In that case, New Moon Day was declared to fall on the 31st day, notwithstanding the fact that the new crescent had been observed on the night of the 30th day. For it was not the observation of the new moon, but the official pronouncement of the Měkuddaš formula by the court which legally initiated the new month.[9]

Having read the above commentary, please understand what Maimonides expected his readers to believe: A throng of witnesses comes forward to report having sighted the new moon after the 29th day of the month has ended. If, in the court's efforts to accommodate all the witnesses, the standard interrogation/examination time period drags on till after sunset ends the 30th day, then the entire day's testimony is declared "null and void" because they hadn't declared the "Měkuddaš formula" before sunset! So even though the new moon was clearly sighted the night before by several witnesses, their testimony is ignored—all because the correct "formula" wasn't recited within the proper time frame. As a result, instead of the previous month being counted as a 29-day month, it is regarded as a 30-day month due to this "technicality."

What makes Maimonides' above explanation of a potential scenario all the more bizarre is the fact that he does not take into consideration the fact that the "dragging-on examination session" resulting in the declaration of a full 30-day month could very well result in a new moon sighting at the end of day #28 of the following month! Thus, after all the "hem-hawing" around that caused the month to be a 30-day month instead of the 29-day month that it should have been, when the subsequent new moon is sighted on day #28 of the following month, they would go back and say the previous month was a 29-day month after all! To borrow Maimonides' own words, "Nothing could be more ludicrous and confusing."

Ancient Jewish writers such as Philo and the author of the *Book of Enoch* offer no hints that a Scriptural month may not consist of 28 days. Philo plainly established that a new month begins with the sighting of a new moon crescent:

> XXVI (140) Following the order stated above, we record the third type of feast which we will proceed to explain. This is the New Moon, or beginning of the lunar month, namely the period between one conjunction and the next, the length of which has been accurately calculated in the astronomical schools. The new moon holds its place among the feasts for many reasons. First, because it is the beginning of the month, and the beginning, both in number and in time, deserves honour. Secondly, because when it [i.e., *the new moon*] arrives, nothing in heaven is left without light, for while at the conjunction, when the moon is lost to sight under the sun, the side which faces earth is darkened, when the new month begins it resumes its natural brightness.
> (141) The third reason is, that the stronger or more powerful element at that time supplies the help which is needed to the smaller and weaker. For it is just then that the sun begins to illumine the moon with the light which we perceive and the moon reveals its own beauty to the eye.[10]

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[9] *The Code of Maimonides* (Mishneh Torah): Book 3, Treatise 8, Chapter II: "The Sanctification of the New Moon" Yale University Press, New Haven, CT, 1956, p. 9.

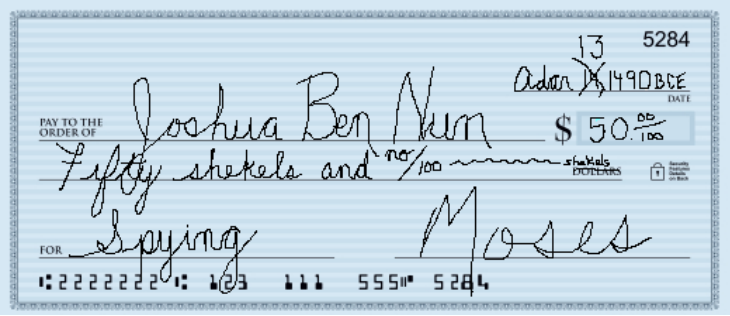
[10] *The Works of Philo*, Vol. 7, "The Special Laws, II," Ch. XXVI, sections 140-141, translated by F. H. Colson (Harvard University Press, Loeb Classical Library, Cambridge, MA, 1937), p. 391, 393.

Again, Philo understood that a new month begins with the crescent new moon sighting. Although he does not directly state that a month may contain 28 days, in his treatise "On the Creation," he certainly hints at such a possibility. Here is what he wrote:

> The number seven when compounded of numbers beginning with the unit, makes eight-and-twenty, a perfect number, and one equalised in its parts. And the number so produced, is calculated to reproduce the revolutions of the moon, bringing her back to the point from which she first began to increase in a manner perceptible by the external senses, and to which she returns by waning. For she increases from her first crescent-shaped figure, to that of a half circle in seven days; and in seven more, she becomes a full orb; and then again she turns back, retracing the same path, like a runner of the *diaulos*, receding from an orb full of light, to a half circle again in seven days, and lastly, in an equal number she diminishes from a half circle to the form of a crescent; and thus the number before mentioned is completed.[11]

Since we have established that Philo understood the sighting of a new crescent moon to designate the beginning of a month, we know he would agree that a new month began with the report of a sighting over Israel on March 31, 2014. The question is, does that mean we should go backwards and cross out "day 30" of the previous month and declare it as having actually been a 29-day month, even though no one in Israel saw the new moon that evening?

Let me put this another way: If I wrote a check and dated it "Adar 14," should I later contact the recipient of that check and tell him, "Please cross out that '14' and make it a '13' instead because we just found out that 'day 1' of last month should have been 'day 2', etc."? Also, if a marriage took place on what we originally regarded as being Adar 7, do we "retro-date" the wedding date as Adar 6? That is precisely what the Israeli New Moon Society would propose be done to avoid having a 28-day month.



The Israeli New Moon Society says, "Yes, you need to retro-date the check because otherwise the twelfth month (*Adar*) would only have 28 days, and a 28-day month is not possible."

On the other hand, ancient Judaism says, "No, since there were no witnesses to a new moon sighting on *Shebat 29*, that month was a 30-day month whether we like it or not, and since a new moon was sighted 28 days after *Adar* began, *Adar* was a 28-day month." The author of *The*

[11] *The Works of Philo*, Complete and Unabridged, "On the Creation," Ch. XXXIV, section 101, translated by C. D. Yonge, Hendrickson Publishers, Peabody, MA, 1993, p. 15.

Book of Enoch, a writing ancient enough to have fragments found among the Dead Sea Scrolls, understood that one month within the Scriptural year may contain only 28 days:

> 9. And in certain months the month has twenty-nine days and once twenty-eight. 10. And Uriel showed me another law: when light is transferred to the moon, and on which side it is transferred to her by the sun. 11. During all the period during which the moon is growing in her light, she is transferring it to herself when opposite to the sun during fourteen days [her light is accomplished in the heaven], and when she is illumined throughout, her light is accomplished full in the heaven. 12. And on the first day she is called the new moon, for on that day the light rises upon her.[12]

Did the author if The Book of Enoch know something about the Creator's calendar that escaped the likes of Maimonides and the rest of what is considered normative Judaism? It is interesting that the representative from the Israeli New Moon society, in virtually every facet of the calendar discussion, misrepresents Scripture and reaches an unreasonable conclusion, all based on an apparent desire to not stray from the teachings of modern Judaism. Why put the teachings of man on a higher pedestal than the Almighty?

Since Yahweh doesn't specify that there *cannot* be a 28-day month, far be it from us to determine that it can't happen because, as we experienced in 2014, it *did*!

[12] *The Book of Enoch* (I Enoch), translated by R. H. Charles, D.Litt., D.D., Hollen Street Press Ltd, at Slough (Great Britain), 1991, chapter LXXVIII, v. 10-12, p. 105. Note: This same understanding is conveyed in chapter 77:10-11 of *The Book of Enoch the Prophet*, a separate translation carried out by Richard Laurence in 1821, where we read, "10. On stated months the moon has twenty-nine days. 11. It also has a period of twenty-eight days."