

Beginning of Months for 2019 **on the Sabbath Calendar**

When the Biblical year draws to an end each year, various criteria determine when the new year or *Beginning of Months* will occur. The Sabbath calendar is quite straightforward in this respect with two main features:

- The typical year is comprised of 52 complete 7-day weeks with no remaining days or partial week at year-end. This is why it is called a Sabbath calendar; the continual repetition of 7-day cycles from the beginning of creation is fully represented within its yearly boundary.
- The first day of the new year is always on the first weekday-4 (Wednesday) after the Vernal (Spring) equinox. Weekday-4, or Wednesday, is used in commemoration of the fourth day of creation when the sun, moon and stars (the elements of earthly timekeeping) were created.

The Sabbath calendar is formed around a backbone of historical information gleaned from the Dead Sea Scrolls. The patterns established by Yahweh in this calendar are amazingly elementary and profound. Due to the mathematical functioning of complete 7-day cycles, there is a phenomenon that is inherently embedded within the Sabbath calendar that needs to be pointed out here. The last day of the year always comes on a weekday-3 (Tuesday). Of course, actual weeks begin on a weekday-1 and end on a weekday-7 which is the Sabbath. The year, however, always begins on a weekday-4 and ends on a weekday-3. More detailed explanations of these features and much more are offered in our book "*The Biblical Calendar Then and Now.*"

For the purposes of this article though, we simply need to begin with the two criteria outlined above to be present when determining the beginning of the next year. Quite often, there are no other factors to complicate things. The incredible simplicity of beginning the next year is only to observe if the equinox has occurred. If the equinox takes place by the end of the 12th month which is always on a weekday-3, then the next day which is a weekday-4 is the first day of the first month of the next year. The Sabbath calendar attains a smooth and solid transition into the next year which is governed by the timing of Earth's orbit around the sun. That's it in a nutshell.

Now if the process was this obvious every year, we would not have any more to write about, but complications arise when the equinox hasn't taken place before the end of the year. The reality of approximately 365.25 days in a yearly Earth orbit means that the Sabbath calendar year of 364 days (52x7) comes up a little short each year. Every 5 or 6 years the year ends before the equinox, and the next year has to begin after the equinox. So this brings us to another part of the process when determining the first day of the first month of the next year.

Most calendars have some sort of mechanism to periodically synchronize their

calendrical year with the annual cycle of the 4 seasons. In other words, the Earth's orbit around the sun, which gives us the 4 seasons, is the benchmark for other calendars too, when it comes to making intercalary adjustments. Our modern Gregorian calendar adds a day every 4 years; Jewish calendars add a whole moon-cycle about every 3 years. When calendars do not make any adjustments, such as the Islamic calendar, then eventually the months and holidays shift through the seasons as the years go by. The Sabbath calendar is again very simple and straightforward in this regard; it adds another week. This way, the 7-day cycles are uninterrupted, and the next weekday-4 will then come after the equinox to be the first day of the first month of the next year.

So now we have 3 criteria to consider in determining the "*Beginning of Months.*"

- The typical year is comprised of 52 complete 7-day weeks with no remaining days or partial cycle at year-end.
- The first day of the new year is always on the first weekday-4 (Wednesday) after the Vernal (Spring) equinox.
- When the first weekday-4 after the end of the 12th month completes before the equinox, one additional week is inserted after the last day of the 12th month, and the next weekday-4 becomes the first day of the first month.

We hope you are digesting this material without too much difficulty. The factors involved all depend on when the year ends, and when the Vernal Equinox occurs. We've covered two of three possible scenarios so far. The third scenario goes like this: The year has ended, and the equinox takes place on the following day which is the very same day as the first weekday-4.

At first glance you may consider that since weekday-4 doesn't come after the equinox, then you would add a week. Ah well, a good assumption, but this is not the case. Technically, part of the day actually is after the equinox when it is taking place on the very same day. Even more so, the unique circumstance of this scenario is that it might very well be the original set-up when Earth-time began on the fourth day of Creation. It follows that the very first ever of the first day of the first month of the very first year in creation would be on a day with equal light and dark. This third scenario just might be the best memorial of the original "*Beginning of Months.*" We do not know this for sure, and it is only our best determination for now. When the Vernal Equinox takes place on the first weekday-4 after the last day of the 12th month, the extra week is **not** added.

So now the most critical element in each of these three scenarios is to know the timing of when the Vernal Equinox takes place. The precise timing is easy enough to look up on the internet or in an almanac. UTC (Coordinated Universal Time) or GMT (Greenwich Mean Time) is usually used. For purposes of our calendar, the time then needs to be converted to Jerusalem time which is 2 or 3 hours later (dependent on when daylight savings time begins in Jerusalem that year). After all, Jerusalem is the apple of God's eye where He chose to put His

Name; not Greenwich, England. In order to maintain uniformity throughout the world, we use the timing of sundown in Jerusalem as the Biblically correct demarcation for the end of one day and the beginning of the next. Once we know the time of the equinox in Jerusalem, then we need to know the time of sundown to determine the true day of the equinox.

Does it seem like something that started off so simple and straightforward is becoming complicated and confusing? It might seem confusing because of the several details we've outlined here, but it really is not complicated. Here is an overall guideline to use for any year.

I. Timing of the Vernal Equinox

- a. What is the date and time of the equinox in UTC?
- b. Has daylight savings time started for this year in Jerusalem?
- c. Add 2 hours to the UTC if it has not started, or 3 if it has.
- d. When is sundown in Jerusalem?
- e. Does the equinox take place before or after sundown?
 1. If the equinox takes place before sundown, use the listed date.
 2. If the equinox takes place after sundown, use the next day.

II. Timing of the "*Beginning of Months*"

- a. When does the Vernal Equinox take place relative to the end of the Sabbath calendar year which will always be on a weekday-3 (Tuesday)?
 1. If the equinox is either on or before the last day of the 12th month, the next day, which will be the first weekday-4, is the first day of the first month of the next year.
 2. If the equinox is after the end of the year and on the very same day as the first weekday-4 before sundown in Jerusalem, this first weekday-4 remains as the first day of the first month of the next year. An extra week is not added.
 3. If the equinox is after the end of the year and also after sundown in Jerusalem on the first weekday-4, then an extra week is added, and the next weekday-4 becomes the first day of the first month of the next year.

So, how does all this come together for 2019? As you may have figured out by now, this year is a particularly tricky one. We hope this article will clear up any confusion. If you made it this far without any smoke blowing out of your ears, then congratulations! Here is this year's scenario:

- The 2019 Vernal Equinox takes place on 3/20 @ 21:59 UTC.
- It is not yet daylight savings time in Jerusalem, so we add 2 hours.
- The equinox in Jerusalem will take place on 3/20 @ 23:59.
- Sundown in Jerusalem on 3/20 is at 17:50.
- The Sabbath calendar year ends on 3/19.
- The first weekday-4 (Wednesday) is 3/20.

- The equinox takes place on 3/20 after sundown in Jerusalem, so it is considered to be on 3/21, and an extra week must be added this year.
- *"Beginning of Months"* for 2019 on the Sabbath Calendar is **3/27/2019**.

We are now getting a revised edition of our book published because we ourselves blew it when we originally calculated the dates for the year beginning in 2019. We failed to account for the equinox taking place after sundown in Jerusalem; so we didn't add the extra week for this year's calculated dates in Appendix 3. Every date listed in the appendix from "New Year" in 2019 to the bottom of the column and into the top of the next column for 2020 through "Shushan Purim" needs to have 7 days added to it.

This is a very regrettable error. We hope we caught it in time not to cause many problems. Accordingly, if you already have an original edition, please disregard the data in Appendix 3 for the 2019-2020 religious year, and use instead the information shown in our blog post *"Notice of Data Correction in Calendar Book."*

We have checked yet again to be certain that the remaining information in Appendix 3 is correct. It was just the data for this one particular year that was skewed. Please note that *"The Biblical Calendar Then and Now"* has all of the information in the Appendices section to provide this data for you through the year 2100; so you will not need to research it for yourself, and the feast dates are already listed for each of those years. Making your own calendar is a snap with the data and templates you will find there; or, easier yet, you can order a good quality printed calendar from us.

The Sabbath calendar could seem quite strange, even heretical, to those who believe that a Biblical calendar month or year must begin with some sort of moon-cycle. As you can see, the Sabbath calendar year is completely defined by 7-day cycles and by the occurrence of the Vernal Equinox. There really is no guess work involved; the two main criteria we started off with are the hard-and-fast rules that must be adhered to, and all the other details we outlined in this article are a result of maintaining adherence to these 2 rules:

1. The Sabbath calendar year is essentially comprised of 52 complete 7-day cycles with no remaining days or partial week left over.
2. The first day of the first month of the next year begins on the first weekday-4 after the Vernal Equinox.

Please be assured that we strive for 100% accuracy, and we will continue to cross-examine our information. Likewise, if research brings forth new evidence that requires us to alter our current understanding, we will revise our published material as necessary. In the meantime, a newly revised edition of *"The Biblical Calendar Then and Now"* will be available soon!