

**How God and the Bible Measure Time**

Leviticus 23:4

As we begin studying the feasts of Israel we need to understand how God and the Bible keep time because Scripture says that the feasts (seven of them) shall be offered “*in their seasons.*” We must recognize that the Jews measure time differently than we do.

**The Calendar and the Moon**

A calendar is a system of organizing units of time for reckoning time over extended periods. The word calendar is from the Latin and means, “*to call attention to the new moon.*” *The Jewish calendar revolved around eyeballing the moon as it rotated around the earth* (called the lunar calendar) and by keeping track of the seasons (the effects of the sun upon the earth; hot, cold and mild). Days were measured from sunset to sunset (the day ended at sunset) and the biblical months had different festivals and seasons.

The months began with the new moon. It takes 29 ½ days for the moon to complete her cycle around the earth. The Jewish secular calendar consists of 12 lunar months, with the odd number months consisting of 30 days and the even number months consisting of 29 days. Each year consists of twelve or thirteen months. An additional month is introduced in years 3, 6, 8, 11, 14, 17, and 19 in a nineteen-year cycle. The lunar year is shorter than the solar year by 11 days. Therefore, every two to three years an additional lunar month is added to the Jewish calendar. So, some Jewish years are 12 months and other years have 13 months. Years are counted from the **Era of Creation**, or Era Mundi, which corresponds to **3760 B.C.**, thus **A.D. 2018** is **5778 EM** to the Jews.

The sacred calendar of the Jews is different than the secular, agricultural calendar. Why? Because in **Exodus 12:2** God declared that the first month of the year for the Jews would be the month in which they celebrated the festival of Passover. *The way God measures time in Scripture revolves around His festivals* (Leviticus 23:4) and as we will see, the festivals portray for us the person and work of Jesus Christ. History is His Story.

**The Calendar and Caesar**

Before we look at the specifics of the Biblical calendar we need to see how the **Biblical sacred calendar** differs from our western calendar of today. The Hebrews kept the years from Creation, but Western Civilization only began tracking years in 776 B.C. with the creation of the Olympics in that year. Every year after that first year would be known in association with the Olympiad Games (e.g. “The third year of the 40<sup>th</sup> Olympiad). The months all followed a lunar calendar. However, the year 45 B.C. has been called the “*year of confusion,*” because in that year Julius Caesar inserted **90 days** to bring the months of the Roman calendar back to their traditional place with respect to the seasons. This was

Caesar's first step in replacing a calendar that had gone badly awry. The pre-Julian calendar had lost step with the cycle of seasons. Following the lead of the Egyptians, Caesar created a solar calendar with twelve months of fixed lengths and a provision for an additional day to be added every fourth year (February 29<sup>th</sup>). As a result, the average length of the Julian calendar year was 365.25 days. This is consistent with the length of the tropical year as it was known at the time. This **Julian calendar** was used by the western world for the next 1500 years.

### Where Has Easter gone?

Under the **Julian calendar** the dating of Easter had become standardized by the Council of Nicea in A.D. 325 (*the first Sunday after the full moon that occurs after the Vernal Equinox of March 21<sup>st</sup>*). The Vernal Equinox is *the first day of spring north of the equator (12 hours of daylight, 12 hours of darkness)*, and *the first day of fall south of the equator*. For 1500 years Western Civilization followed the Julian calendar, but Easter was drifting away from its springtime position and was losing its relation with the Jewish Passover. Over the next four centuries, scholars debated the "correct" time for celebrating Easter and the means of regulating this time by the calendar. The Church made intermittent attempts to solve the Easter question, without reaching a consensus.

By the sixteenth century the equinox had shifted by ten days. **Pope Gregory XIII**, who succeeded Pope Pius in 1572, soon convened a commission to consider reform of the calendar, since he rightly *believed Easter should fall close to the Jewish Passover*. The recommendations of Pope Gregory's calendar were instituted on 1582 February 24. Ten days were deleted from the calendar, so that **1582 October 4 was followed by 1582 October 15**, thereby causing the vernal equinox of 1583 and subsequent years to occur about March 21. The omission of ten days of calendar dates was necessitated by the astronomical error built up by the Julian calendar over its many centuries of use, due to its too-frequent leap years. A common year is 365 days in length; a leap year is 366 days, with an intercalary day, designated February 29, preceding March 1. Leap years are determined according to the following rule: **A leap year in the Gregorian Calendar is a year that is exactly divisible by 4, except for years that are exactly divisible by 100; these centurial years are leap years only if they are exactly divisible by 400**. The changeover to the Gregorian calendar system occurred first in only Roman Catholic countries. Adoption of the Gregorian calendar in the rest of the world progressed slowly. For example, England and its colonies did not change their calendar from the Julian to the Gregorian until September 1752. OS (Old Style) is a date prior to 1752.

### The Bible and Calendaring

As we come to our study of the festivals of Israel it is important for you to have a working knowledge of the Biblical Jewish calendar and how it associates with our Western Gregorian calendar. **Appendix 1** is a chart that gives us a general understanding of both. I would encourage you to bring the following chart to our successive studies.