

1. Introduction

Understanding the calendars used by biblical writers and ancient historians helps us examine the prophetic periods in Daniel and Revelation. Hebrew, Macedonian and Roman month names must be interpreted carefully before we express their dates in a common calendar.

Throughout these lessons, dates expressed in our familiar month names will use the Julian calendar unless otherwise stated. Hebrew calendar equivalents are calculated using the [calendar resource hosted by Utrecht University](#). These calculations provide a consistent framework for comparison, but a calculated date must be distinguished from a date explicitly recorded in an ancient source.

Three questions therefore guide our study: What date does the ancient author give? How is that date converted? And how does the proposed chronology relate to biblical prophecy?

A period expressed in days has the same elapsed length regardless of the calendar used to label its beginning and end. Periods expressed in months or years require additional care, because lunar months and solar months differ, and lunisolar calendars include additional months in certain years.

In the following sections, we will explain the calendars used in this study and the assumptions underlying our calculations. We will then examine how these calculations relate to the prophetic periods.

A. Previously...

So far in our series on the Great Tribulation, we have learned:

- [When was the Great Tribulation?](#)
- What was the Abomination of Desolation?
- Had the gospel been preached to all nations before the Great Tribulation?
- Why does Revelation equate Jerusalem to Sodom and Egypt?
- Who was Josephus, and is he a credible historian?
- [What are the Seven Seals?](#)
- How did the seals relate to the Great Tribulation?
- Was one quarter of the population killed, as Revelation says?
- [Who were the 144,000?](#)

B. This Lesson

- Hebrew Calendar
- Macedonian Calendar
- Julian Calendar
- Tyrian calendar

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C. Future Lessons on the Great Tribulation:

- Understanding the various calendars of the Great Tribulation.
- Who were the armies crossing the Euphrates in Revelation?
- Why did Jesus say His coming would be like lightning from the east to the west?
- How long was the Great Tribulation — seven years or 2300 days?
- Was one-third of the population killed, as Revelation says?
- When did the Great Tribulation begin?
- When did it end?
- When did the Christians flee Jerusalem?
- How many people were killed during the Great Tribulation?
- What is the significance of the silence in heaven for about half an hour?
- When was the forty-two-month prophecy of Revelation?
- What is the significance of the five-month prophecy in Revelation 9?
- What do Daniel's 1,290-day and 1,335-day prophecies concern?
- What is the importance of Antioch in the prophetic calendar?
- What blessing is promised to those who wait and reach the 1,335 days?

2. Hebrew Calendar

Daniel was written in Hebrew in chapters 1:1–2:4a and 8–12, while the intervening section is in Aramaic. The prophecies examined in Daniel 8–12 therefore appear in the Hebrew portion of the book and concern Israel, its sanctuary and its worship. Understanding the Hebrew calendar provides an important background to their interpretation.

The Hebrew calendar is lunisolar: its months follow the lunar cycle, while additional months keep its festivals aligned with the seasons. It differs from the solar Julian and Gregorian calendars.

However, the language of Daniel does not itself establish the precise calendar rules underlying every prophetic period. We must also distinguish the calendar used in antiquity from the later fixed Hebrew calendar. Applying the later calendar's rules to ancient years provides calculated dates, which must be assessed alongside the historical evidence.

A. Hebrew Calendar Calculator

Throughout these lessons, I use the Hebrew Calendar Calculator hosted by Utrecht University to provide a consistent basis for calculations. For the first century CE, its corresponding Western dates are expressed in the Julian calendar.

The calculator explains that it uses the current rules of the Hebrew calendar, traditionally associated with the fourth century CE but not generally followed until after the tenth century. Its application to earlier centuries therefore provides a calculated framework rather than proof of the precise calendar observed at the time.

Accordingly, Hebrew–Julian equivalents in these lessons should be understood as calculated dates unless independently confirmed by historical evidence. Where a proposed fulfilment depends on an exact date, the source, calendar assumptions and method of counting will be identified.

B. Lunisolar Calendar

The fixed Hebrew calendar follows a nineteen-year cycle, with seven leap years occurring in the 3rd, 6th, 8th, 11th, 14th, 17th and 19th years. Each leap year contains an additional month, keeping the calendar aligned with the seasons.

The civil year begins with Tishrei, usually in September or October. However, the biblical numbering of the months begins with Nisan in the spring (Exodus 12:2). Thus, Nisan is the first month in the biblical sequence, although the numbered Hebrew year changes at Tishrei. These fixed calendar rules provide the framework used by the Utrecht calculator when calculating dates for earlier centuries.

C. Leap Years

In the fixed Hebrew calendar, a common year contains twelve months and lasts 353, 354 or 355 days. A leap year contains thirteen months and lasts 383, 384 or 385 days.

In a common year, Adar has twenty-nine days. In a leap year, there are two months named Adar: Adar I, with thirty days, and Adar II, with twenty-nine days. The varying lengths of Cheshvan and Kislev account for the different year lengths.

The following table presents the year lengths and leap years calculated under these rules for the period examined in this study.

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Year CE	Hebrew Year (AM)	Year # in 19-year cycle	Year Type	# of Days	# of months
65-66	3826	7th	Common	354	12
66-67	3827	8th	Leap	385	13
67-68	3828	9th	Common	353	12
68-69	3829	10th	Common	355	12
69-70	3830	11th	Leap	384	13
70-71	3831	12th	Common	355	12
71-72	3832	13th	Common	353	12
72-73	3833	14th	Leap	384	13

Hebrew Years Calculated Using the Fixed Calendar

D. Months in the Hebrew Calendar

The following table lists the months in civil-year order, beginning with Tishrei. The familiar Western months indicate their approximate seasonal position; they are not exact date conversions.

Hebrew month	Approximate Western Months	Days in the Fixed Calendar
Tishrei	September/October	30
Cheshvan	October/November	29 or 30
Kislev	November/December	29 or 30
Tevet	December/January	29
Shevat	January/February	30
Adar (common years)	February/March	29
Adar I (leap years only)	February/March	30
Adar II (leap years only)	March/April	29
Nisan	March/April	30
Iyar	April/May	29
Sivan	May/June	30
Tammuz	June/July	29
Av	July/August	30
Elul	August/September	29

In a common year, use the single Adar row. In a leap year, replace it with Adar I and Adar II.

3. Macedonian Calendar

Josephus frequently uses Macedonian month names when writing for his Greek-speaking readers. In his discussion of Passover, he identifies Xanthicus as the month the Jews called Nisan and refers to its fourteenth day as a day of the lunar month.¹ This provides direct evidence that he could use a Macedonian name for a Hebrew month.

However, Macedonian month names were also used in regional calendars, so the name alone does not establish an exact Hebrew or Julian equivalent. Each passage must be examined in context, particularly where Josephus mentions a Jewish festival or provides another chronological reference.

In these lessons, the month and day recorded by Josephus will be distinguished from their proposed Hebrew identification and calculated Julian equivalent. Where a Macedonian month is understood to represent a Hebrew month, that identification will be stated before applying the Utrecht calculator.

This approach allows us to compare the historical accounts with the prophetic periods while making the basis of each conversion clear.

4. Julian (Roman) Calendar

Julius Caesar's calendar reform took effect in 45 BCE. The Julian calendar is solar, with a normal year of 365 days and an additional day every fourth year. Its average year is slightly longer than the seasonal year, producing a difference of approximately three days over four centuries.

The Gregorian calendar was introduced in 1582 to correct this accumulated difference and refine the leap-year rule. Its adoption occurred at different times in different countries.

Throughout these lessons, Western dates are expressed in the Julian calendar unless otherwise stated. This matches the convention used by the Utrecht calculator and NASA's eclipse tables for first-century dates.

For the period examined here, 66–73 CE, the corresponding Gregorian date is two days earlier than the Julian date. For example, 15 March 70 CE Julian corresponds to 13 March 70 CE Gregorian. Applying the Gregorian calendar to dates before its introduction is called using the "proleptic Gregorian calendar."

Changing the calendar changes the date assigned to an event, but not the event itself or the number of elapsed days between two events.

5. Tyrian Calendar

The calendar used at Tyre provides another possible framework for interpreting the Macedonian month names found in Josephus. However, identifying a month by its Macedonian name does not, by itself, establish that Josephus was following the Tyrian calendar in that passage.

Where a Tyrian interpretation affects a proposed date, these lessons will explain the evidence for using it and distinguish the resulting Julian equivalent from a calculation based on the Hebrew calendar. The choice must be supported by the historical context, rather than selected simply because it produces a desired prophetic interval.

¹ Josephus, *Antiquities of the Jews* 3.248 (3.10.5).

6. Timed Prophecies

A. Three and a Half Years

The prophetic passages include several expressions of time:

- Three and a half years.
- A time, times and half a time.
- One thousand two hundred and sixty days.

These expressions must be examined in their individual contexts rather than assumed to describe the same historical period. In these lessons, some concern Jesus' ministry and the subsequent ministry of the apostles. However, the "time, times, and half a time" in Daniel 12:7 corresponds to the forty-two months of Revelation and relates to the Great Tribulation. The scriptural and chronological reasons for these distinctions will be explained in the relevant lessons.

We must also distinguish a prophetic expression of time from a calculation using actual calendar months. Three and a half years of twelve thirty-day months total 1,260 days. However, three and a half years in the Hebrew calendar do not necessarily contain that number of days, because its months vary in length and some years contain an additional month. Calendar arithmetic therefore helps us test a proposed chronology, while the context of each passage guides our understanding of the period intended.

B. Forty-Two Months

This period is mentioned in Revelation as the time when the Gentiles tread down Jerusalem.

REVELATION 11:2

BUT LEAVE OUT THE COURT WHICH IS OUTSIDE THE TEMPLE, AND DO NOT MEASURE IT, FOR IT HAS BEEN GIVEN TO THE GENTILES. AND THEY WILL TREAD THE HOLY CITY UNDERFOOT FOR FORTY-TWO MONTHS.

Revelation also describes the beast's authority and its war against the saints

REVELATION 13:5,7

AND HE WAS GIVEN A MOUTH SPEAKING GREAT THINGS AND BLASPHEMIES, AND HE WAS GIVEN AUTHORITY TO CONTINUE FOR FORTY-TWO MONTHS. IT WAS GRANTED TO HIM TO MAKE WAR WITH THE SAINTS AND TO OVERCOME THEM. AND AUTHORITY WAS GIVEN HIM OVER EVERY TRIBE, TONGUE, AND NATION.

In these lessons, the forty-two months are understood to correspond to the "time, times, and half a time" of Daniel 12:7 and to describe a period within the Great Tribulation, culminating in Jerusalem's destruction.

The proposed chronology runs from Nisan 15, 67 CE, to Elul 14, 70 CE, using the Hebrew calendar framework explained above. These are the proposed Hebrew endpoints of the calculation; they must be distinguished from the dates recorded directly by Josephus.

Josephus describes three signs associated with the Temple: a brilliant light lasting half an hour, a heifer giving birth to a lamb, and the eastern gate opening of its own accord. Their dating and relationship to the forty-two-month period will be examined in the lesson devoted to these signs. Forty-two months of thirty days total 1,260 days. However, forty-two actual Hebrew calendar months do not necessarily contain that number of days. The relationship between these prophetic expressions must therefore be examined through both their scriptural context and the calendar assumptions used in the historical calculation.

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C. Five months

REVELATION 9:10

THEY HAD TAILS LIKE SCORPIONS, AND THERE WERE STINGS IN THEIR TAILS. THEIR POWER WAS TO HURT MEN FOR FIVE MONTHS.

These five months are understood in these lessons to correspond to Titus's siege of Jerusalem in 70 CE. The proposed chronology extends from Nisan 15 to Elul 14, using the Hebrew calendar framework explained above.

This interval represents five Hebrew calendar months when counted inclusively, ending on the day before the corresponding date in Elul. These proposed Hebrew endpoints must be distinguished from the dates recorded by Josephus and their calculated Julian equivalents.

The historical evidence, calendar conversions and connection with Revelation 9 will be examined in the lesson devoted to this period.

D. 2300 Days

Daniel 8:13–14 describes a period of 2,300 days culminating in the cleansing of the sanctuary. In the chronology developed in these lessons, its primary historical fulfilment extends from the murder of the high priest Onias III to the cleansing and rededication of the Temple under Judas Maccabaeus in 164 BCE.

DANIEL 8:13-14

THEN I HEARD A HOLY ONE SPEAKING; AND ANOTHER HOLY ONE SAID TO THAT CERTAIN ONE WHO WAS SPEAKING, "HOW LONG WILL THE VISION BE, CONCERNING THE DAILY SACRIFICES AND THE TRANSGRESSION OF DESOLATION, THE GIVING OF BOTH THE SANCTUARY AND THE HOST TO BE TRAMPLED UNDERFOOT?"
AND HE SAID TO ME, "FOR TWO THOUSAND THREE HUNDRED DAYS; THEN THE SANCTUARY SHALL BE CLEANSED."

However, Jesus subsequently warned His disciples about the "abomination of desolation" spoken of by Daniel.

MATTHEW 24:15

"THEREFORE WHEN YOU SEE THE 'ABOMINATION OF DESOLATION,' SPOKEN OF BY DANIEL THE PROPHET, STANDING IN THE HOLY PLACE" (WHOEVER READS, LET HIM UNDERSTAND),

His warning shows that Daniel's prophecy concerning desolation still had an application beyond the events of the Maccabean period.

On this basis, these lessons also explore a secondary application of the 2,300 days to the Great Tribulation. The proposed chronology extends from 27 December 66 CE to the fall of Masada on 14 April 73 CE, an interval of 2,300 elapsed days. These Julian dates form the calculated framework used in this study.

Jesus did not explicitly repeat the 2,300-day period. Its secondary application therefore requires its own scriptural and historical argument. The forthcoming lesson will examine both applications, their historical evidence and the calendar calculations supporting them.

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E. 1290 Days

DANIEL 12:11

“AND FROM THE TIME THAT THE DAILY SACRIFICE IS TAKEN AWAY, AND THE ABOMINATION OF DESOLATION IS SET UP, THERE SHALL BE ONE THOUSAND TWO HUNDRED AND NINETY DAYS.

Daniel 12:11 connects the 1,290 days with the removal of the daily sacrifice and the setting up of the abomination of desolation. Identifying these events is therefore essential to establishing the beginning of the period.

In the chronology proposed in these lessons, the count begins at Nisan 15, 67 CE, alongside the forty-two-month period. The detailed lesson will examine how this proposed starting point relates to the events specified by Daniel.

The proposed endpoint of 29th October 70 CE, is associated with the period following the games held by Titus at Caesarea in honour of Domitian's birthday in 70 CE. Josephus records that more than 2,500 Jewish captives were killed during these celebrations, through combat, wild beasts and burning.

The precise endpoint and its Hebrew–Julian conversion will be examined in the detailed lesson. A date obtained by counting 1,290 days must be distinguished from a date independently recorded for the conclusion of the games.

F. 1335 Days

Daniel 12:12 pronounces a blessing upon those who wait and reach the 1,335 days, extending forty-five days beyond the 1,290-day period.

DANIEL 12:12

BLESSED IS HE WHO WAITS, AND COMES TO THE ONE THOUSAND THREE HUNDRED AND THIRTY-FIVE DAYS.

In the chronology proposed in these lessons, this period begins at Nisan 15, 67 CE, with 13 December 70 CE proposed as its endpoint. This date is a chronological proposition to be examined in the detailed lesson, rather than a date explicitly recorded by Josephus.

The proposed fulfilment is associated with Antioch, where Titus refused requests to expel the Jewish residents or abolish their existing privileges. His decision preserved their place within the city.

Antioch also had an established Christian community. Acts 11:19–26 describes the spread of the gospel there and records that the disciples were first called Christians in Antioch. Jewish survivors brought to the city may therefore have encountered the gospel and come to faith in Jesus.

In this interpretation, the blessing extends beyond physical survival and protection to salvation in Christ. The conversion of these particular survivors is not documented, but it is proposed here as a possible connection between Daniel's promised blessing and the Christian witness in Antioch. The historical evidence and the calculations underlying the proposed date will be examined in the forthcoming lesson.

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7. Summary

Understanding ancient calendars helps us examine the relationship between biblical prophecy and historical events. Throughout these lessons, we distinguish the dates recorded by ancient writers, their calculated equivalents and the prophetic interpretations proposed.

Josephus frequently uses Macedonian month names, whose meaning must be assessed in context before assigning Hebrew or Julian equivalents. The Utrecht Hebrew Calendar Calculator provides a consistent framework for our calculations, while applying later fixed calendar rules to earlier centuries. Western dates in these lessons are Julian unless otherwise stated.

The prophetic periods must likewise be examined individually. In the interpretation developed here, Daniel 12's "time, times, and half a time" corresponds to Revelation's forty-two months. Other periods are connected with Jesus' ministry and the subsequent ministry of the apostles.

The 2,300 days are examined first in relation to Onias III and the cleansing of the Temple, followed by a proposed secondary application to the Great Tribulation. The five months, 1,290 days and 1,335 days will each receive separate consideration, with their historical evidence and calendar calculations explained.

With this foundation established, the next lesson examines the 1,260 days and their proposed relationship to the ministry of Jesus and the apostles.