

The Forefathers of North Carolina Pioneer Andreas Killian

Calendar reform and a change in the date of New Year.

Addendum number 18, page 248, The 3rd of January 2014

In 325 AD the First Council of Nicaea agreed on the date of Easter, based on the lunar cycle, tying it to the vernal equinox. But the Julian calendar, in effect at that time, had a 0.002% error in the length of the year. By the year 1582 this had accumulated to a ten day error.

The error arose because the lunar year has 354-355 days, while the solar year is 365-366 days. In 1582 Pope Gregory XIII issued a Papal Bull to implement a modified proposal of Aloysius Lilius to reform the Julian calendar, and bring Easter back in line with the vernal equinox.

Aloysius Lilius recommended correcting the *epactae*, which gives the *age of the moon* in days on January the 1st. He also recommended reducing the number of leap years, every four hundred years, from 100 to 97. Every year divisible by four was a leap year, except years divisible by 100. But years divisible by 400 were leap years.

In effect ten days were skipped to bring the vernal equinox back to the 21st of March in the year 1582. This reduced the length of the year by 10 minutes and 48 seconds per year to 365 days, 5 hours, 49 minutes 12 seconds.

The Catholic countries accepted the revised calendar, but the Protestant and Orthodox countries did not until much later. The result was for centuries different parts of Europe, along religious lines, used different calendars.

The new calendar also changed the date of New Year from the 1st of March to the 1st of January. But in fact many countries, including Germany, had already changed New Year to January the 1st long before Pope Gregory's Bull was issued.

1. Venice was the first to accept the Gregorian calendar in 1582, but had already changed the New Year date to the 1st of January in 1522
2. Catholic Germany accepted the Gregorian calendar in 1583, but had already change the New Year date to the first of January in 1544.
3. Protestant Germany did not accept the Gregorian calendar until 1700, but had already change the New Year date in 1559.
4. The British Empire changed the calendar and the date of New Year at the same time in 1752.
5. Russia did not accept the Gregorian calendar until 1918, but changed the New Year date in 1700.
6. The last country to accept the Gregorian calendar was Greece in 1923.

All other countries now using the Gregorian calendar changed between 1522 and 1923.

Before the calendar change new year in England began on the 25th of March, the feast of the Annunciation of the Blessed Virgin. By the time England, and its colonies, accepted the Gregorian calendar, and the new date for New Year in 1752, the error had crept up to eleven days. In making the change September the 2nd 1752 was followed by September the 14th and eleven days were lost. There were riots in England with people shouting "... give us back our

eleven days... .” The tax year remained the 25th of March, and this is the 6th of April in the Gregorian calendar.

This means Andreas Kilian, and his first three children, were born under the Gregorian calendar, lived in Pennsylvania and North Carolina from 1732 to 1752 under the Julian calendar, and died after 1752, in North Carolina, under the Gregorian calendar.

The dates between the 1st of January and the 1st of March are a year later than stated in some documents, depending on the country, and must be corrected. Also some dates will be ten to thirteen days earlier, depending on the country and when it accepted the Gregorian calendar.