

# AN \*Easiest, Surest and Cheapest\* proposal – REFORM OF GREGORIAN CALENDAR

My suggestion to Reform of the Gregorian calendar since 1970-71, has been a continuous upgrading aimed at an \*Easiest, Surest and Cheapest\* proposal to bridge Calendar Reform with Decimalisation/Metrication (especially linking definitions for base Time unit (36% of SI-second) with new Length Unit via arcAngle ( $\pi/180$  i.e. 1-degree) on Earth Surface. Emphasis is laid on the possibility to use 19-year cycle & ( $5*47=235$ ) lunation & compensating the 2-hour difference (refer [http://www.brijvij.com/bb-kp\\_count-by-week\\_cycles.doc](http://www.brijvij.com/bb-kp_count-by-week_cycles.doc)), using ratio 'tithi/phase value of 138Weeks/965 (in close approximation to 19-yr/6932.5 or 235-lunation/6932.5)'.

My simple suggestion "shifts the day of July 31<sup>st</sup> and inserted as the day of February 29<sup>th</sup> " during all years. The 365<sup>th</sup> day is placed outside of year format and to be called 'World Peace Day' and during Leap Years following div.4/skip 128<sup>th</sup> –years (i.e. 366<sup>th</sup> day once every 4-years) is placed between June 30<sup>th</sup> and July 01<sup>st</sup> during years of occurrence. This give Mean Year =  $(365+31/128)=365.2421875$  days. The SAME mean year is obtained when 52-week (in  $4*91d$  or 13-weeks) calendar intends using Leap Weeks (instead of Leap Day once every 4-years) by using **MY DIVIDE BY SIX(6) plan with added Keplers' Leap Weeks symmetrically placed** – in cycle of  $3*(7*128)$ -years/477 LWks, giving Mean Year =  $7*(52+1/6+29/2688)=365.2421875$  days. Please see details at my Home Page: <http://www.brijvij.com/> (for details) – including my several options, placed at: <http://www.brijvij.com/synopsis-n-364d-options.doc>.

My discussions with [USMA@colostate.edu](mailto:USMA@colostate.edu) and astronomy experts at [CALNDR-L@LISTSERV.ECU.EDU](mailto:CALNDR-L@LISTSERV.ECU.EDU) since 2002 April, can be examined at achieves.

(Added: 20070306/15:85(decimal))

**BRIJ BHUSHAN VIJ, Author**

**Reference:** <http://personal.ecu.edu/mccartyr/calendar-reform.html>

Welcome to the Home Page for

## Calendar Reform

featuring *THE WORLD CALENDAR*

---

[Standing Proposals](#) | [Historical Reforms](#) | [Puzzles and Paradoxes](#)  
[Calendar Links](#) | [Mail](#)

Look up your birthday on  
The ISO Week Date Calendar

Subscribe  
to:

**CALNDR-L**  
discussion list

---

The dominant conceptual scheme for civil time-keeping at present is the Gregorian Calendar: a 400-year-old modification of a 2000-year-old scheme known as the Julian Calendar. First instituted on Papal authority, the Gregorian Calendar's primary purpose was to restore a continuity of time-keeping with an Early Christian era some twelve centuries prior.

Time-keeping and scheduling in our present, post-industrial, information-age society thus rely on an anachronistic scheme serving the interests of men in a pre-scientific, theocratic society, with a feudal economy.

The invention of mechanical clocks made it possible to divide every day into twenty-four equal time-segments.

The day is therefore easily divisible into halves, thirds and quarters, as is each of its twenty-four hours. The practical advantage of these regular divisions over the variable divisions of daylight, from dawn to noon to sunset, is obvious.

In contrast, the Gregorian Calendar's strict adherence to the solar cycle produces an expiring calendar every year. This requires continual schedule-revisions for many important activities, such as education. It also precludes regular divisions within the year necessary for accurate statistical comparisons. Half-years have an equal number of days only in leap-years; the year never divides evenly into quarters; the months are irregular; and neither the year nor the months can be divided regularly into weeks.

It doesn't have to be this way.

---

## Standing Proposals for Calendar Reform

Reform seemed imminent in the earlier decades of the 20th century, as mechanisms for world-wide social progress developed with the League of Nations and subsequently in the United Nations.

Two reform proposals then attracted the most attention. These seemed to offer the best solutions to contemporary time-keeping and scheduling problems caused by the irregularities of the Gregorian Calendar. Each recommended a **perennial calendar** involving the use of so-called "blank days." The blank day concept was suggested originally, perhaps, by an American colonist from Maryland in 1745 writing under the pseudonym of [Hirossa Ap-Iccim](#). The idea was later popularized by an Italian priest, [Abbé Marco Mastrofini](#), in 1834.

These proposals were a 12-month scheme with identical quarters, known as "The World Calendar," and a 13-month scheme with identical months: "The International Fixed Calendar." The latter originated in the mid-19th century as "The Positivist Calendar" of [Auguste Comte](#), and was also named for its prominent promoters in this century: "The Cotsworth Plan" and "The Eastman Plan."

- [The World Calendar](#)
- [The International World Calendar Association](#)
- [History of the World Calendar Association](#)
- [Elisabeth Achelis, Calendar Reformer](#)
- [U.S. Government Opposes Calendar Reform \(1955\)](#)
- [A World Calendar for All Ages \(<http://www.brijvij.com/>\)](#) – added by Brij B. Vij 2007 March 06.
- Other 12-Month Plans:
  - [The Fixed-Week Calendar](#) (Hollon, 1996)
  - [The Bonavian Calendar](#) (Carrier, 1970)
  - [The Long-Sabbath Perennial Calendar](#) (McCarty, 1996)
  - [New Millennium Calendar](#) (Markham, 1998)
  - [60-Week Calendar](#) (Arturo, 2000)
  - [Alphabetic Calendar](#) (da Costa, 2002)
  - [The Raenbo Calendar](#) (Travis)
  - [The Ecliptic Calendar](#) (Scott, 2002)
  - [The Reform Calendar](#) (Young, 2003)
  - [Common-Civil-Calendar-and-Time](#) (Henry, 2003)
  - [The Symmetry Calendar](#) (Bromberg, 2004)
  - [The 30x11 Calendar](#) (Abbott, 2005)
- [History of the 13-Month Calendar](#)
- [The Positivist Calendar](#) (Comte, 1849)

- [Auguste Comte, Calendar Reformer](#)
- [Moses Cotsworth, Calendar Reformer](#)
- [Calendar Reform for the Business World](#) (Eastman, 1926)
- Some 13-Month Calendar Proposals:
  - [The Georgian Calendar](#) (Ap-Iccim, 1745)
  - [A Reformed Calendar without Blank Days](#) (Colligan, 1930)
  - [Thirteen Moon Calendar Change Movement](#) (Arguelles, 1995)
  - [43/450 Calendar](#) (Engel, 2000)
  - [The New Earth Calendar](#) (Reich, 2000)
  - [13-Month "Sol" Calendar](#) (Eikner, 2002)
  - [A Simple Lunisolar Calendar](#) (Pontisso, 2002)
  - [Kluznickian Calendar](#) (Kluznick, 2005)
- Other Ideas:
  - [The Decimal Calendar](#) (Mann, 1997)
  - [ISO Week Date Calendar](#)
  - [The Quinta Calendar](#) (MacGregor, 1998)
  - [Universal Human Clock](#) (Hasan, 2003)
  - [World Petin-Meton Calendar](#) (Petin, 2003)
  - [Sexagesimal Calendar](#) (Vitrant, 2003)
  - [The Hermetic Lunar Week Calendar](#) (Meyer, 2005)
  - [A Modern Calendar](#) (Owens, 2006)

[TOP](#)

---

## A History of Calendar Reforms

The present civil calendar followed by most of the world has its origins in the early Roman civilization. [Julius Caesar](#) reformed the Roman Calendar in 46 BC, simplifying the periodic calendar correction by adding an extra day to February every four years. Our month of July, formerly "Quintilis," was therefore named in honor of Julius.

Because the Julian leap-year rule was not followed correctly at first, [Caesar Augustus](#) introduced a subsequent calendar correction around 8 BC. Our month of August, formerly "Sextilis," was accordingly named in his honor.

With the lengths of the year and months established, the Julian Calendar still preserved the Roman [Kalends](#), [Nones](#) and [Ides](#) for the divisions within the months. Emperor [Constantine](#) then reformed the calendar in the 4th century, by introducing the seven-day week, probably modeled on the Christian sabbatical cycle.

But the Julian calendar year eventually proved to be slightly longer than the solar year. By the 16th century, the beginning of spring fell in early March. [Pope Gregory XIII](#), acting on the advice of [Christopher Clavius](#), therefore excised 10 days from the calendar by shortening October 1582, and he revised the leap-year rule: No leap years in centesimal years (e.g. 1700, 1800, 1900), except those divisible by 400 (e.g. 2000, 2400, 2800).

Most European nations adopted the Papal reform relatively quickly, with the exception of Britain and its Colonies, which held out until 1752. At that time, 11 days had to be excised in order to bring the British calendar into sync with the rest of Europe.

The French adopted a "Revolutionary Calendar" for about a dozen years in the nineteenth century, until Napoleon reestablished the Gregorian Calendar in 1806. The "Republican Calendar" was later reinstated in

Paris for several months in 1871.

Russia and the Soviet Union converted to the Gregorian Calendar after the Revolution, in 1918.

The Eastern Orthodox Churches continued observing the Julian Calendar until 1923, at which time some, but not all, skipped the first 13 days in October, and introduced a "Revised Julian Calendar" with a unique variation on the leap-year rule. This has caused a schism between [New Calendarists](#) and [Old Calendarists](#). The problem remains unresolved.

- ["Render Unto Caesar" Julian Reform](#) (Achelis, 1954)
- ["Constantine And The Week"](#) (Achelis, 1954)
- ["Gregory's Contribution" Gregorian Reform](#) (Achelis, 1954)
- [Papal Bull \*Inter Gravissimas\*](#) (Gregory XIII, 1582 *Latin/English*)
- [Calendar History](#) (E. Weisstein)
- [Calendar FAQ With Historical Reform Information](#) (C. Tondering)
- [Calendar Reform in Scotland](#) (1600)
- [The Calendar Act: Gregorian Reform in Britain/America](#) (1752)
- [Poor Richard's Almanack](#) (B. Franklin, 1752)
- [Le Calendrier Republicain](#)
- [Russian Calendar History](#) (Achelis, 1954)
- [Eastern Orthodox Leap-Year Reform](#) (Milankovitch/Shields, 1924)

[TOP](#)

---

## Puzzles and Paradoxes

"What, then, is time? If no one asks me, I know what it is. If I wish to explain it to him who asks me, I do not know." --St. Augustine, *Confessions* Bk 11, Ch XIV

- [How Long is the Calendar?](#)
- [Year 2000: Beginning or End?](#)
- [The Paradox of "Retroactive Reform"](#)
- [Years of Confusion: \*Clash of the Calendars\*](#)
- ["Three Sundays in a Week"](#) (E. A. Poe, 1850)

[TOP](#)

---

## Calendar Links

- Subscribe to [CALNDR-L](#), an unmoderated email forum for discussion of social, historical and philosophical dimensions of Calendars and Time Reckoning.
- [The Calendar Zone](#) (Don't Miss!)
- [Calendars through the Ages](#)
- [calendarreform.org](#)
- [Everything Calendar!](#)
- [Calendar Date \(.com\)](#)
- [Rainbow Calendar](#)
- [Calendars and Their History](#)

- [The Perpetual Calendar](#)
- [Hermetic Systems: Calendar Studies](#)
- [The Times of Our Lives: Social Rhythms and Cycles](#)
- [Articles in the \*Catholic Encyclopedia\*](#)

- |   |  |   |                                  |
|---|--|---|----------------------------------|
| ○ | <a href="#">Christian Calendar</a>     | ○ | <a href="#">Dates and Dating</a> |
| ○ | <a href="#">Reform of the Calendar</a> | ○ | <a href="#">Dominical Letter</a> |
| ○ | <a href="#">General Chronology</a>     | ○ | <a href="#">Epect</a>            |

- [Today's Calendar and Clock Page](#)
- [One Day Too Many / Ein Tag zuviel](#) (Schlag, 1998)
- [Sun, Moon, and Sothis Reforms in Ancient Egypt](#) (Rose, 1999)
- [The Holocene Calendar](#), a chronological reform.
- [A New Calendar](#) Exploring options for Calendar Reform

[TOP](#)

Mail to: [Rick McCarty](#)

**Reference:** <http://personal.ecu.edu/mccartyr/bonavian.html>

## The Bonavian Calendar

By Chris Carrier

The Bonavian calendar integrates the most desirable features of the Gregorian Calendar, the World Calendar, and the International Fixed Calendar.

The common year of the calendar consists of 364 days, which are divided into four quarters of 91 days each. The first month in each quarter consists of 35 days, and the next two months of 28 days each. Months and weeks always begin on the same day of the week. Every month in the *Original Bonavian Calendar* looks like this:

<b>Fri.</b>	<b>Sat.</b>	<b>Sun.</b>	<b>Mon.</b>	<b>Tue.</b>	<b>Wed.</b>	<b>Thu.</b>
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
(last week in long months only)						
29	30	31	32	33	34	35

Five times in 28 years, specifically in years which, after division by 28, leave remainders of 0, 5, 11, 16, or 22, a leap week is added. This addition of 35 days every 28 years brings the average length of the year to 365.25 days. In years which are divisible by 896, however, leap week is cancelled. This reduces the average year length to  $365 + (31/128)$  days, a value an order of magnitude more accurate than the Gregorian calendar's 365.2425.

Leap-week calendars on the Bonavian model are a reasonable compromise between those who wish to preserve the seven-day week, which the Bonavian Calendar does, and those who wish a simple

[Return to the Home Page for Calendar Reform](#)

calendar in which each month and quarter can be easily memorized.

There are now three versions of the Bonavian Calendar; the first is the *Original Bonavian Calendar*, written by me in 1970 back when I was 11. In my case, the big annual event was the last day of school, which at all schools, whether they be public, religious, or private, in Ventura County, California, where and when I grew up, fell on the second Friday in June. This was the logical New Year day.

A name for the calendar wasn't settled on until about 1975. I had given it a number of names, "Leap Week Calendar" and "Arcturian Calendar" (after Arcturus, prominent right after sunset in the North Temperate Zone at Original Bonavian New Year) but eventually I decided to name it the "Bonavian Calendar" after my high school, St. Bonaventure H.S. in Ventura, California.

My second calendar is named the *Bonavian Civil Calendar*. It features quarters of  $35+28+28=91$  days, however, this time, the year, quarter, month and week all begin on Sunday and end on Saturday, instead of from Friday to Thursday as in the *Original Bonavian Calendar*. This looks more familiar than the Original Bonavian system to the lay person in the Western world who is used to the week beginning on Sunday or Monday.

In addition, leap week was moved from mid-August to the last week of the year in December, as it makes computing the number of days between dates easier if the intercalary days are at the end of the year, as they are in the Islamic, Persian, French Republican, both of the Egyptian, and several other calendars.

The third, *Bonavian Leap-Month Calendar*, was not invented until 1993. It was inspired by that wonderful book by Eviatar Zerubavel, *The Seven Day Circle*. The *Bonavian Leap-Month Calendar* was given the same synchronization as the *Bonavian Civil Calendar*, and although it featured 91 day quarters, it divides them as The World Calendar:  $31+30+30$  with years and quarters beginning on Sunday and months beginning on Sunday, Wednesday, and Friday in the three months of the quarter.

In years divisible by 28, a thirteenth month of 35 days duration is added, named Mercedonius, which, since we are still using Roman names, is logical because that was the 13th month name the Romans were using when they still had leap months pre-Caesar. The 35 day leap month is shortened to 28 days in years divisible by 896 to fix the average year length at  $365+(31/128)$  days.

For a free copy of BASIC software that will give the date in all three Bonavian Calendars, send email to my Internet address [72157.3334@compuserve.com](mailto:72157.3334@compuserve.com).

**Reference:** <http://moderncalendar.blogspot.com/>

## **A Modern Calendar**

It's the 21st century. We use a calendar established hundreds of years ago that varies the days in a month, requiring you to count on your knuckles, or say a poem to yourself, to remember how many days are in a given month. A given date, such as your birthday, usually falls on a different day year-to-year. The first day of a month doesn't always begin on the same day of the week.

***Could it really be that hard to start fresh, to create a calendar that actually makes sense?*** A calendar that would not only be exceptionally easy to understand and use but at the same time transform our lives in a fundamental way?

In theory you work five days a week then get the weekend “off.” On the weekend, by the time you get done with cleaning your home, cutting the grass, shopping, running kids all over town, perhaps attending a religious service, and so on and so on, you MIGHT find a little quality time at home with friends and family. Next thing you know it’s Monday morning and you’re back at work. Feeling relaxed and rejuvenated? Probably not. You’re on a perpetual treadmill watching the years pass by.

Ever notice how great those occasional 3-day weekends are? You have lots of time to do things, you don’t feel rushed, and you return to work rejuvenated.

***What if every weekend were 3 days long?*** Of course, the idea of a permanent 4-day work-week has been proposed many times, but it has never taken hold because it robs businesses of too many work days (unless you assume 9 or 10 hour workdays, which is about as popular as mud). And, for many companies and employees, four days is simply ineffective. Employees spend Monday just to getting back in the groove, and within two days they’re already thinking about the weekend. Five, 8-hour days has proven to be about right.

How do we achieve regular 3-day weekends while preserving a 5-day workweek? It’s simple, and oh so “RADICAL.” We add 3 and 5 to get 8. ***Make each week 8 days long.***

This opens up the possibility of restructuring our current ridiculous calendar into a logical and easy one. Here it is:

- Every year starts on the same day, Sunday, January 1st.
- Each week is eight days long.
- A new day is added, Remday, derived from “Remembrance Day”, which falls between Friday and Saturday.
- The workweek, is as now, Monday to Friday.
- The weekend is now three days long: Remday, Saturday and Sunday.
- Each month (except the last) has five weeks, which translates into 40 days in a month, and 10 months in a year (we drop February and June).
- Every month has the same number of days!
- Every month starts on the same day, Sunday the 1st!
- The first nine months end on the same day, Saturday the 40th.
- December becomes a very short but very special period of five days, or six days in a leap year. These five or six days are considered a very special time for cultural observances, including Christmas on Sunday, December 1 (the old December 27, and remember the current December 25 probably has no connection to Christ’s actual birthdate.)
- Current federal holidays would now all fall on Remday, as would all days of remembrance. With 46 Remdays a year, many new official days of remembrance could be approved without debate over “giving” up another workday. Most federal holidays long ago lost their connection to the historical event by exact date. Now holidays would occur on precisely the same date and day every year (just like your birthday).

The negatives?

- You have to get used to “losing” days at the end of the year. You go from Thursday on the last day of the year immediately to Monday on the first day of the next year. On a leap year, you go from a Friday to a Monday.
- People who believe the 7-day week is religious dogma will be upset.
- Astrology fans would be upset, but this certainly isn’t the first time the calendar has changed!
- We “lose” about 23 workdays total during the year (factoring in federal holidays). Who’s complaining? The “hit” to companies seems reasonable compared to the overall benefits to

society of a little extra time off, truly relaxing weekends, and a sensible, logical calendar. With 46 3-day weekends available to the consumer, travel and retail businesses would probably see a boom in revenues.

- Some people might be compelled to work six days a week. But that’s true today. Many, many people work more than a 40-hour week, because they (1) love their work, (2) are by nature workaholics, (3) are avoiding an unattractive home life, (4) must work longer hours to keep a company competitive, (5) must work longer hours to pay the bills at home (whether just to get food on the table or to lead a more expensive, but not essential, lifestyle), or (6) are being coerced to work longer by a demanding boss, peer pressure in a workaholic work culture, etc. This will not change whether the week length is 7, 2 or 20 days long.
- Some people with February or June birthdays would have to get used to new birth months.
- Months wouldn’t correlate exactly into quarters or seasons, but they never did precisely anyway.

I vote for a simple, logical calendar. It’s long overdue. Here it is:

<i>Every Year</i>	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Remday	Saturday
January	1	2	3	4	5	6	7	8
	9	10	11	12	13	14	15	16
	17	18	19	20	21	22	23	24
	25	26	27	28	29	30	31	32
	33	34	35	36	37	38	39	40
March	1	2	3	4	5	6	7	8
	9	10	11	12	13	14	15	16
	17	18	19	20	21	22	23	24
	25	26	27	28	29	30	31	32
	33	34	35	36	37	38	39	40
April	1	2	3	4	5	6	7	8
	9	10	11	12	13	14	15	16
	17	18	19	20	21	22	23	24
	25	26	27	28	29	30	31	32
	33	34	35	36	37	38	39	40
May	1	2	3	4	5	6	7	8
	9	10	11	12	13	14	15	16
	17	18	19	20	21	22	23	24
	25	26	27	28	29	30	31	32
	33	34	35	36	37	38	39	40
July	1	2	3	4	5	6	7	8
	9	10	11	12	13	14	15	16
	17	18	19	20	21	22	23	24
	25	26	27	28	29	30	31	32
	33	34	35	36	37	38	39	40
August	1	2	3	4	5	6	7	8
	9	10	11	12	13	14	15	16
	17	18	19	20	21	22	23	24

	25	26	27	28	29	30	31	32
	33	34	35	36	37	38	39	40
September	1	2	3	4	5	6	7	8
	9	10	11	12	13	14	15	16
	17	18	19	20	21	22	23	24
	25	26	27	28	29	30	31	32
	33	34	35	36	37	38	39	40
October	1	2	3	4	5	6	7	8
	9	10	11	12	13	14	15	16
	17	18	19	20	21	22	23	24
	25	26	27	28	29	30	31	32
	33	34	35	36	37	38	39	40
November	1	2	3	4	5	6	7	8
	9	10	11	12	13	14	15	16
	17	18	19	20	21	22	23	24
	25	26	27	28	29	30	31	32
	33	34	35	36	37	38	39	40
December	1	2	3	4	5	6		

There have been, of course, many proposals for reforming the calendar. The most sensible in a 7-day week context involves a 4-week-per-month calendar, where every month starts on the same day. But a more sensible week-length (8 days) in addition to a rational month structure results in the best of all worlds.

Friday, December 29, 2006

## Comments welcome!

Please share your thoughts on reforming the calendar.

Posted by Calendar8 at 5:18 PM 1 comments

Subscribe to: [Posts \(Atom\)](#)

## Blog Archive

- ▼ [2006 \(1\)](#)
  - ▼ [December \(1\)](#)
    - [Comments welcome!](#)