

BACKGROUND TO LUNAR PERIGEE PLANTINGS

Brian Keats

BIODYNAMIC CALENDAR GUILD AND RESEARCH

An informal international guild of calendar compilers was formed in February 2012 with the aim of working collaboratively with Mark Moodie to further research into biodynamic planting practices. Mark who has set up databases to gather and analyze research results through www.considera.org took advantage of a visit of mine to the UK to organise a face-to-face meeting with Nick Kollerstrom, Mark and I as well as having Sherry Wildfeuer join us via phone. As a result of this meeting we agreed upon dates and times that could be helpful in the investigation of the effects of 2013 eclipses on seed plantings. These were then published in four calendars: *Stella Natura* (Sherry), *Gardening and Planting by the Moon* (Nick) and my *Antipodean Astro Calendar* and *Northern Hemisphere Astro Calendar*. Mark is still gathering data from this international experiment and the results will not be known in time for the 2014 calendar editions.

This same guild, in conjunction with Mark, met by phone in June 2013. The feedback was that there had been small but significant and encouraging participation in the experiment from both hemispheres. We then decided upon the following for 2014: 1) to invite other calendar compilers to join the guild; 2) to suggest dates for readers to continue investigating the question “Does planting seeds at the time of an eclipse have a negative effect on the germination and growth of a plant?”; 3) to offer dates to investigate a second question “Does planting seeds at the time of a lunar perigee have a negative effect on the germination and growth of a plant?” Lunar perigee is defined as the

moon’s closest distance to the earth in its 27.55-day cycle.

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Maria Thun advocated that planting seeds in the hours around a lunar perigee was not beneficial to subsequent plant growth. Maria Thun based calendars have this period marked as a non-planting time.

I am of the opinion this is true for some of the perigees but not all of them and more so in some years than in other years. This opinion comes from my experience in observing the weather, being familiar with astronomical rhythms, and realizing that the weather and the plants are dancing to the same tune that is being called by the Sun, Moon, planets, and stars.

Every perigee is different, as is every full moon, as is every peak declination (ascension or descension). I have just listed three different lunar rhythms that take place every month. It is important to consider them in relationship to each other.

You will find that up to twice in every year the perigee takes place within twelve hours of the Full or New Moon—that is, the perigee/apogee rhythm is in synch with the lunar phase rhythm. This beautiful fact comes about as fourteen full-moon cycles takes 413.32 days and fifteen perigee cycles takes 413.42 days. When this occurs you will notice:

it is the closest perigee of the year (proxigee) around 357,000kms;
a fortnight before or after the proxigee is the most distant apogee around 406,600km;
there are very high and very low tides in this period;

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there will be widespread unusual or extreme occurrences of weather (including earthquakes).

These lunar periods are known as “supermoons,” a term coined by Richard Nolle and defined as “a New or Full Moon that occurs with the Moon within 90% of its closest approach to Earth.” The supermoons are 7.5 lunar months apart, alternating between New and Full Moons. This half of the 413-day cycle. Sun, Moon and the Earth are in a straight line on these occasions (*syzygy*). Lunar rhythms have a correlation to rhythms in all fluids (including molten lava beneath our tectonic plates and plant sap). The extreme weather tends to be in a period three days either side of the proxigee moon.

In 2014 the perigee distances will range between 356,900 at the proxigees to 369,800kms. Tidal forces are inversely proportional to the cube of the Moon’s distance and consequently there are huge differences within this range. It is well worth taking note of those perigees under 358,000kms each year.

In my experience of perigees prevailing climatic and weather/atmospheric conditions become exaggerated. If it is tending towards wet, then it will be very wet and if it is a hot period, then it will be very hot! If it was summer I could expect floods in the tropics but heat waves in a temperate zone. This could be fine-tuned by consulting a synoptic weather forecast to see where the high and low-pressure cells are likely to be located (I publish an annual forecast for Australia one year in advance).

With a sense of anticipation of what could happen weather-wise in a particular month I can plan my horticultural activities. If a close perigee (under 360,000kms) is pending when my prevailing weather conditions have been warm and moist I could expect fungal activity to be rife and take prophylactic actions accordingly. That perigee, under those conditions, would obviously have a negative effect on seed plantings. However if conditions had been very dry it could well turn out to be a favorable time.

You will find the more distant perigees are further away, time wise, from the Full and New

Moons, the respective lunar rhythms are not in synch.

I am quite sure our horticultural activities and future research will be far more fruitful when we become more aware of the interplay of the various lunar rhythms and carry out our gardening and farming, as well as designing our experiments, accordingly.

Why choose 2014 to run a Lunar Perigee experiment?

I will start by saying why 2013 was not a good time to run the experiment!

I have already mentioned that every 7.5 and 15 lunar months the phase cycle synchronizes with the perigee/apogee cycle (206.5 and 413 days). Well, every year, another two lunar rhythms come into phase with each other. Around every winter solstice the Full Moon coincides with its peak ascension. When the Sun is at its weakest the Moon is at its strongest. These two rhythms are opposite around every summer solstice. When the Sun is strong the Full Moon is weak.

In 2013, three lunar rhythms came into synch culminating in the June Full Moon which took place on the perigee and at peak ascension. All three have correlations to increasing tide heights. All three indicated relationships to seed germination rates in Ernst Zurcher’s report on research work into plant rhythms “Chronobiology of Trees: synthesis of traditional phytopractices and scientific research, as a tool of future forestry.”

Having an extra lunar rhythm in synch with the perigee cycle to contend with in 2013 was not ideal.

The year 2014 does not have that complication and in the table below are the perigee dates with distances of the Earth from the Moon. The zodiacal element as per Thun is also given to help in the choice of seeds to plant. The closest perigees are numbered 1 to 4— NB there are two proxigees, one at New Moon and one at Full. The proxigee New Moon will give the highest tide of the year, which will be supported by the perihelion that week. The proxigee Full Moon will give you high tides, too, but that month will have the lowest neap tides.

The 2014 perigees are all taking place in the southern hemisphere. The perigees progress through the zodiac and hence the hemispheres as 5 zodiacal constellations are over the southern hemisphere and 5 of the north (Pisces and Virgo are over the equator). The 2015 proxigee Moon will be in Pisces and by 2016 it will be in Aries and thereby over the northern hemisphere.

I suggest that the perigees in 2014 will have a more pronounced effect in the southern hemisphere, particularly over the late winter period with the proxigee taking place in August. Repeating the experiment in 2016 for example, would help to discern if there is a hemispherean difference in

a perigee's influence on seed germination or plant growth.

Dates and Times for the planting trials are given below in three time zone sections:

NB The times given are the exact times for the perigees and the central point of the eclipses. The period of effect is generally considered to be 12 hours either side of these times.

In the Astro Calendars the suggested experimental planting period is highlighted.

Mark Moodie's website www.considera.org/2014planting.html will have more details of the research project and helpful suggestions.



LUNAR PERIGEE EXPERIMENT DATES AND TIMES FOR 2014 TRIALS

PERIGEE DATES (UNIVERSAL TIME)

MONTH	DAY	TIME	MOON-EARTH DISTANCE (KM.)	ELEMENT	PLANT	COMMENT
Jan.	1	21:00	Perigee: 356,921	fire	fruit/seed	2 New Moon: Proxigee
Jan.	30	9:58	Perigee: 357,100	earth	root	New Moon
Feb.	27	19:52	Perigee: 360,400	earth	root	
Mar.	27	19:30	Perigee: 365,700	air	flower	
Apr.	23	1:27	Perigee: 369,800	earth	root	
May	18	12:58	Perigee: 367,100	fire	fruit/seed	
Jun.	15	4:34	Perigee: 362,100	fire	fruit/seed	
Jul.	13	9:27	Perigee: 358,300	earth	root	3 Full Moon
Aug.	10	18:43	Perigee: 356,896	earth	root	1 Full Moon: Proxigee
Sep.	8	4:29	Perigee: 358,400	air	flower	
Oct.	6	10:41	Perigee: 362,500	air	flower	4 Full Moon
Nov.	3	0:21	Perigee: 367,900	air	flower	
Nov.	27	23:11	Perigee: 369,800	earth	root	
Dec.	24	16:43	Perigee: 364,800	earth	root	

ECLIPSE DATES

Apr.	15	7:00	Lunar Eclipse	earth/air	root/flower
Apr.	29	6:14	Solar Eclipse	fire	fruit/seed
Oct.	8	10:51	Lunar Eclipse	air	flower
Oct.	24	9:57	Solar Eclipse	air	flower

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PERIGEE DATES (AUSTRALIAN EASTERN TIME)

MONTH	DAY	TIME	MOON-EARTH DISTANCE (KM.)	ELEMENT	PLANT	COMMENT
Jan.	2	7:00	Perigee: 356,921	fire	fruit/seed	2 New Moon: Proxigee
Jan.	30	19:58	Perigee: 357,100	earth	root	New Moon
Feb.	28	5:52	Perigee: 360,400	earth	root	
Mar.	28	5:30	Perigee: 365,700	air	flower	
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PERIGEE DATES (PACIFIC TIME)

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