



## OUR NEAREST NEIGHBOR, V

By Walt Robinson

As we have seen in previous articles, the moon has been used in many forms relating to worship, national symbols on flags, and in the arts. But what about modern-day man? What influence does the moon have on us today? Is there truth in the idea that a full moon increases the crime rate or the birth rate? And what about those strange things called solunar tables found almanacs?

Many things are considered "in correlation" to the Moon. Those things are frequently portrayed in literature and films and re-enforced by constant repetition in the media. Newspaper reporters are notorious for trying to associate the full moon with crime rates, birth rates and other strange happenings. It can be found that for most correlations, the statistical base is founded on myth, folklore, misconceptions and cognitive biases.

One popular belief is that the moon cycle regulates a woman's cycle of fertility. The Moon's cycle of roughly 27.3 days and a woman's menstrual cycle of 28 to 29 days is mere coincidence. It is also a popular belief that ovulation occurs most frequently near full moon. Numerous studies have shown that a woman's cycle and ovulation are evenly distributed thought the lunar cycle, which brings us to birthrates.

There is a strong belief, even by hospital workers, that there is an increase in birthrates during a full moon. Scientific studies, though, have failed to show any correlation. A study done in France in 1991 of roughly 5,000 births, showed they

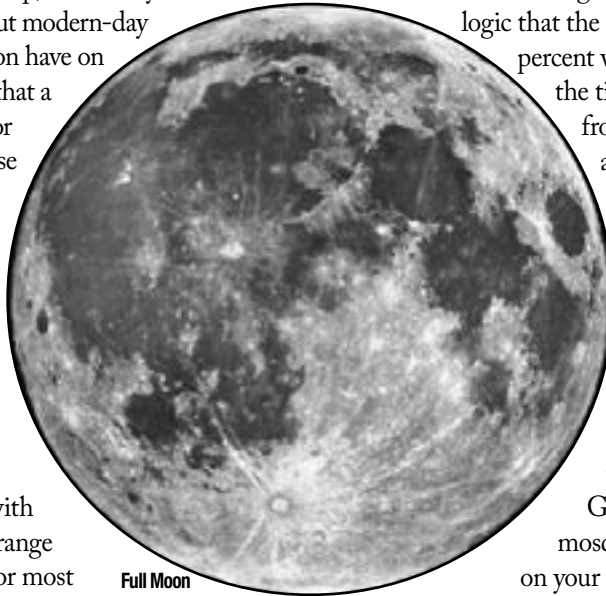
were evenly distributed throughout the lunar cycle and that there was no increase during any particular phase of the moon. Again in 1994, researchers in Italy analyzed 7,000 births and found similar results. Another misconception is the fact that the moon's tidal forces, which exert a

pull on the oceans of the earth, also effect the mood and behavior of human beings. The misconception stems from the logic that the human body, consisting of 80 percent water, should be acted upon just as the tides of the ocean. All of this came from author Arnold Lieber who wrote a book in 1978 called *The Lunar Effect*, republished as "revised and updated" in 1996 and titled *How the Moon Affects You*. The misconception lies in the fact that the moon's tidal forces effect unbound water, such as the oceans, but does not effect bound water, as is contained in the human body. Astronomer George O. Abell claims that a mosquito exerts more gravitational pull on your arm than the moon does on your whole body.

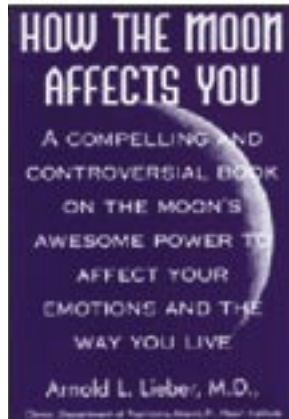
And what about the crime rate? Many people who work in law enforcement tend to believe that crime increases during the full moon. Statistics show otherwise. Studies have shown that when individual incidents are graphed against the phases of the moon, there is no correlation to the full moon over any other phase. It is thought that people working in law enforcement are more aware of nights when there is a full moon, since it is highly visible, and take note

of it more than during crescent phases. Using preconceived notions that "a full moon means an increase of the crime rate," heightens the senses, and actually makes them believe there is more activity.

Who hasn't referred to the *Old Farmer's Almanac* for weather forecasting, planting times and the best times for fishing and hunting. So just what are those solunar tables all about? In 1926 John Alden Knight wrote his first draft of



Full Moon  
Courtesy Lick Observatory

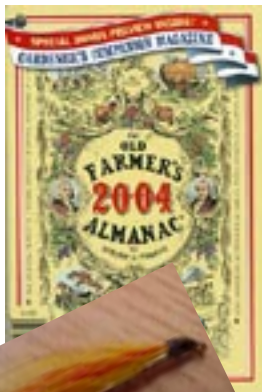


Find a copy of *How the Moon Affects You* in the New Age section of the bookstore or library.

## BIRTHS



Do birth rates rise during a full moon? Not according to studies done in France and Italy.



**The Old Farmer's Almanac and Knight's Solunar Theory have been used for decades to attempt to predict when to hunt, fish, plant and harvest.**

what has become known as the "Solunar Theory". He began with around 30 different variables that determined the "best times" for fishing and hunting. Over the following years, he reduced it down to only three variables, which he considered effected the times — the Sun, the Moon and the tides. But he deduced while that the Sun was a constant, the moon was inconclusive in the theory, but tides seem to play an important part (again, tides being caused by the moon's tidal forces). Another scientist, in order to disprove Knight's theory, had oysters flown in from the East Coast to Chicago. It was a startling discovery to see that oysters, even

out of their native environment, still responded to the tides of the ocean. After a week with no outside forces, the oysters were still triggered by high tide to open their shells. Modern day solunar tables now include a maximum and minimum time for fishing and hunting, which are based on the tides and lunar phase.

What is the validity of planting crops during certain phases of the moon? The first century Roman naturalist Pliny the Elder wrote a set of books on the natural sciences. In them, he had chapters devoted to the planting and harvesting of crops by the phase of the moon. Most of it was second-hand information, probably from the Druids. Modern-day experiments show that some seedlings absorb more water during full moon, thus speeding up the germinating process. Most "lunar farmers" generally consider that plants that produce crops above ground (e.g. beans) should be planted and harvested during the waxing moon (new to full); while plants that produce crops below ground (e.g. carrots) should be planted and harvested during the waning moon



**According to *The Old Farmer's Almanac*, above-ground crops should be planted and harvested during the waxing moon, and root crops during the waning moon.**

out of their native environment, still responded to the tides of the ocean. After a week with no outside forces, the oysters were still triggered by high tide to open their shells. Modern day solunar tables now include a maximum and minimum time for fishing and hunting, which are based on the tides and lunar phase. What is the validity of planting crops during certain phases of the moon? The first century Roman naturalist Pliny the Elder wrote a set of books on the natural sciences. In them, he had chapters devoted to the planting and harvesting of crops by the phase of the moon. Most of it was second-hand information, probably from the Druids. Modern-day experiments show that some seedlings absorb more water during full moon, thus speeding up the germinating process. Most "lunar farmers" generally consider that plants that produce crops above ground (e.g. beans) should be planted and harvested during the waxing moon (new to full); while plants that produce crops below ground (e.g. carrots) should be planted and harvested during the waning moon

(full to new). Whether there is scientific basis for this guideline remains to be seen. Nevertheless, there are many that continue the practice.

And finally, can the moon be used to forecast weather? Consider this: How many times have you seen a halo around the sun or the moon? High cirrostratus clouds composed of ice crystals that reflect the sunlight or moonlight cause those



**A halo around the Moon does seem to be a predictor of weather.**

halos. If these clouds thicken, they are usually the omen of either snow or rain within 24 hours. Other than this instance, there is no other method of forecasting the weather using the moon, although there are many in folklore: "Pale Moon doth rain, Red Moon doth blow, White Moon doth neither Rain nor snow. Clear Moon, frost

soon." If you analyze this, it does make some sense. A pale moon probably means clouds covering the moon, which could portend rain; a red moon would naturally be caused by a lot of pollutants and dust in the atmosphere, already kicked up by winds; a white moon naturally means it is clear and calm; but can anyone tell me what is a "clear moon"?

Next month I'll explore some of the theories on the origins of the moon — and for all you die-hard deep-sky observers who detest the moon — why, if we didn't have the moon, we would be in big trouble! Until then, *Tacitae per amica silentia lunae* "Amid the friendly silence of the still moon" (Vergil II.255, *Aeneid*).



*Walt Robinson has been a member of the Astronomical Society of Kansas City since 1987. His present duties include Webmaster for the society's Web site. He has presented many programs at the public nights at Powell Observatory and in Bonner Springs, Kan. where he lives.*

*Walt also runs the "Robinson Lunar Observatory" to spur interest in the moon among amateur astronomers. His recent "lunar light ray" program brought many amateurs together from across the United States and abroad to study and observe these events. An article written in the Astronomical League's Reflector explained the program, and as a result recruited many more interested amateurs into studying the moon.*