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**Lunacy**

*The worst things in the world happen during a full Moon, right? Wrong.*

*By Ken Kaye
Staff Writer*

For those given to lore, it might seem likely that a full Moon shone on the sinking of the Titanic in 1912, the bombing of Pearl Harbor in 1941 or the Sept. 11, 2001, terrorist attacks. The full Moon, after all, is frequently associated with dark calamities, if not werewolves and haunted houses.

But that wasn't the case.

Surely, then, the Moon turned full on the day the stock market crashed in 1929, or that Amelia Earhart vanished in 1937 or President John F. Kennedy was assassinated in 1963, right?

Nope.

The fact is a full Moon … has been in the sky during very few major world events in the past century, which would seem to debunk the myth that lunar forces inspire aberrant behavior or influence the course of history on Earth.

"There are always lots of reports of strange things during a full Moon. But I think if you look at overall statistics, there's no correlation," says Geoff Chester of the U.S. Naval Observatory in Washington, D.C., which has kept a careful record of full Moons dating to 1700.

A review of full Moon dates, compiled by the Naval Observatory, shows that most of the major events of our time took place during some other lunar phase.

* For instance, when the atomic bomb was dropped on Hiroshima, Japan, on Aug. 6, 1945, the Moon was in its last-quarter phase.
* When civil rights leader Martin Luther King Jr. was assassinated in April 1968, the Moon was new.
* President Richard Nixon's resignation in August 1974 came six days after the full Moon.

Even for humankind's major forays into space, when you might think a full Moon would be appropriate, it was a no-show.

* When Soviet cosmonaut Yuri Gagarin became the first man in space in April 1961, the Moon was in its last-quarter phase.
* When Neil Armstrong took the first step on the lunar surface in July 1969, it was during the gibbous waxing Moon.

Some major developments did happen close to a full Moon:

* One day after a full Moon, on Feb. 20, 1962, John Glenn became the first American to orbit the Earth.
* Two days after a full Moon, on Jan. 28, 1986, the space shuttle Challenger exploded, killing seven astronauts, including schoolteacher Christa McAuliffe.
* But of the major historic milestones in the past 100 years, only D-Day, June 6, 1944, when Allied Forces stormed the beaches of northern France to begin the conquest of Germany in Europe, took place during a full Moon. And that was deliberate: Military commanders wanted lots of Moonlight so airborne troops could land near enemy lines and Navy ships could fire on German targets with precision before dawn.

From a global standpoint, full Moons have seen their share of mayhem:

* On Jan. 16, 1995, a Japan earthquake killed more than 400 people.
* On Nov. 11, 2000, 170 skiers and snowboarders were trapped and killed when their cable car caught fire while being pulled through an Alpine tunnel.
* On Jan. 28, 2002, more than 600 were killed in Nigeria, trying to flee explosions at an army weapons depot, only to drown.

Did the Moon actually provoke any of these episodes? No way, astronomers and historians say.

"It's pure coincidence," says Travis Wright, an employee at Buehler Planetarium in Davie. "I doubt that it has anything to do with the voice of the universe telling people what to do."

… According to folklore, the full Moon usually has negative connotations, says Christine Jackson, a professor of humanities at Nova Southeastern University in Davie.

For instance, she says it is believed the full Moon triggers more suicides than usual and sends more people to mental institutions.

In fiction and film, the Werewolf needed the light of the full Moon to come to life, and Dracula had to avoid Moonlight to suck blood from his victims.

In the recent movie, *Pirates of the Caribbean, moonlight* revealed the pirates were half-dead, nothing but skeletons.

"So the light of a full Moon can sometimes show death," she says.

**Only a Minute**

Astronomically speaking, a full Moon occurs for about one minute, when the Moon and the sun are on opposite sides of the Earth. The reason this instant is so short is that all three bodies are in constant motion.

However, planetarium officials consider the full Moon to occur over a full day and even more loosely, over three days, says Jack Horkheimer, director of Miami Planetarium.

"The night before a full Moon and night after full Moon look that same to the untrained eye," he says.

The Moon has four major phases in a month, or more precisely, 29.5 days: New Moon, first quarter, full Moon, and last quarter.

Those phases are further broken down into waxing crescent, waxing gibbous, waning crescent and waning gibbous, based on how much of the lighted surface is visible…
Horkheimer says the myth that the Moon creates strange events arises from ancient times, when there were few cities and the countryside was extremely dark on Moonless nights.

The full Moon provided enough light for people to attend festivals and other gatherings at night. This was when they were most susceptible to thieves, pickpockets and robbers, he says.

That led to the fear that the full Moon created havoc in people's lives, he says.

Today, police can't say for sure whether crime increases during a full Moon, other than to say the "freaks" tend to come out. But then, they note such people come out the rest of [the] time as well.

"In general, in South Florida, it's irrelevant whether the Moon's in or out," says Hollywood Police Lt. Tony Rode. "We have our fair share of crime either way."

As for that term "lunatics," derived from "Luna," the Roman Moon goddess: Horkheimer says the light of a full Moon might keep people up at night, and a lack of sleep might make them cranky, if not crazy.

But does the full Moon inspire werewolves to howl or monsters to come out?

Only in people's imaginations, Horkheimer says.

"People want to believe in the mysterious, in magic and in things beyond their control," he said. "So if something happens they can say it must have been the full Moon."

**Moon Facts**

* The Moon is believed to be 4.6 billion years old, the same age as the Earth.
* It has no atmosphere or water.
* It is comprised of a rocky material that is heavily scarred with craters from meteorite impacts.
* The same side is permanently turned toward Earth.
* The gravitational forces between the Earth and the Moon generate two ocean high tides per day.
* The word "lunatic" comes from the notion that the Moon's forces could make a person go crazy.
* The Moon is moving away from the Earth at a rate of 3.8 centimeters each year. When it formed, the Moon was about 14,000 miles from Earth; now it's about 240,000 miles away.

**Moon Nicknames**

* January: Wolf Moon
* February: Ice or Snow Moon
* March: Storm or Worm Moon
* April: Growing or Pink Moon
* May: Hare or Flower Moon
* June: Mead or Strawberry Moon
* July: Hay or Buck Moon
* August: Corn or Sturgeon Moon
* September: Harvest Moon
* October: Blood or Hunter's Moon
* November: Snow or Beaver Moon
* December: Cold Moon

**Historic Moon Events**

* Dec. 16, 1773: Boston Tea Party; new Moon
* July 4, 1776: Declaration of Independence; waning gibbous.
* April 12, 1865: Surrender of the Confederate Army after the battle of Appomattox, signaling the end of the Civil War; waning gibbous
* April 14, 1865: President Abraham Lincoln assassinated; waning gibbous

**Lunacy Article Worksheet**

1. The worst things in the world happen during a full Moon.

 a. True b. False

*Match the event with whether the Moon was full, was not full, or close to full.*

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| --- | --- |
| \_\_\_\_2. Assassination of Martin Luther King.\_\_\_\_3. President Richard Nixon resigning as president.\_\_\_\_4. Yuri Gagarin became the first man in space.\_\_\_\_5. Neil Armstrong took the first step on the Moon.\_\_\_\_6. John Glenn became the first American to orbit Earth.\_\_\_\_7. The space shuttle Challenger exploded killing the entire crew.\_\_\_\_8. D-Day invasion of France.\_\_\_\_9. Earthquake in Japan kills more than 400 people.\_\_\_\_10. 170 skiers and snowboards die when their cable car caught fire.\_\_\_\_11. Over 600 Nigerians drown when they attempt to escape a fire in an army weapons depot.\_\_\_\_12. Atom bomb is dropped and destroys Hiroshima, Japan | A. CloseB. NoC. Yes |

13. According to folklore, which of the following are affected by the Full Moon?

 a. Dracula sucking blood from his victims.

 b. Pirates in the *Pirates of the Caribbean.*

 c. Suicides.

 d. Werewolves.

 e. All of the above.

14. Astronomically, how long does the full Moon actually last?

 a. One second. c. One hour.

 b. One minute. d. One week.

15. According to Jack Horkheimer, loosely speaking, how long does a full Moon last?

 a. One day. c. Five days.

 b. Three days. d. One week.

16. Which of the following is not a phase of the Moon?

 a. New Moon c. Waxing Quarter

 b. Gibbous Waxing d. Waning Crescent

17. Police can't say for sure whether crime increases during a full Moon.

 a. True b. False

*Match the Month with the Moon’s nickname.*

|  |  |
| --- | --- |
| \_\_\_\_18. April\_\_\_\_19. August\_\_\_\_20. December\_\_\_\_21. February\_\_\_\_22. June\_\_\_\_23. October | A. Blood or Hunter’s MoonB. Cold MoonC. Corn of Sturgeon MoonD. Growing or Pink MoonE. Ice or Snow MoonF. Mead or Strawberry Moon |

24. The same side of the Moon’s surface is permanently turned toward Earth

 a. True b. False

25. This force between the Earth and the Moon generate two ocean high tides per day.

 a. Electromagnetic c. Strong Nuclear

 b. Gravity d. Weak Nuclear

26. The Moon is not moving away from the Earth.

 a. True b. False

27. Which event did not occur during a waning gibbous Moon?

 a. Boston Tea Party.

 b. Declaration of Independence signed.

 c. President Lincoln was assassinated.

 d. The Confederate Army surrendered at Appomattox ending the Civil War.