

Evidence found of oysters syncing valve behavior with lunar cycle

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A team of researchers from the University of Bordeaux and CNRS, EPOC, UMR has found evidence that suggests oysters sync their valve behavior with the lunar cycle. In their paper published in the journal

Biology Letters, the group describes their study of oysters in the wild over three and a half lunar cycles and what they observed.

It is commonly known that humans and other animals have a [circadian clock](#), which is tied closely to the daytime/nighttime cycle of the sun. Other creatures have also been found to have [internal clocks](#) closely associated with the ocean's tides. In this new effort, the researchers have found that at least some oysters may have a type of [lunar cycle](#).

To better understand the impact of the moon and its phases on oysters, the team captured 12 Pacific oysters off the coast of France and attached electrodes to them. They returned the oysters to the sea, where they were monitored for behaviors that could be linked to the behavior of the moon.

In comparing data from the monitors with astronomical charts, the researchers found that the oysters opened their valves at different times depending on the phase of the moon. They found that the valves were most open during the build-up to and during a new moon. In contrast, the valves were less open during the time when the moon was entering its first quarter and full phases. More specifically, they found that the mollusks were opening their valves more during times when it was darker at night. They suggest their findings indicate that oysters can somehow sense moonlight.

They also suggest that over time, the sensing ability of the oysters may have led to the development of an internal clock based on the phases of the moon—thus, an [oyster](#) would be less likely to open during the time when the [moon](#) would normally cast the greatest amount of light, regardless of whether that light actually reached them. Clouds or other coverings could have an impact on how much light reaches the oysters.

The researchers suggest further that an internal lunar clock could be

beneficial to oysters because it would be tied to the times when food was most plentiful due to low light levels.

More information: Moonlight cycles synchronize oyster behaviour, *Biology Letters* (2019). [royalsocietypublishing.org/jou ...
.1098/rsbl.2018.0299](https://royalsocietypublishing.org/journal/rsbl/2018.0299)

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