

Large muskies lured by the moon

May 28 2014

The lunar cycle may synchronize with feeding activity, luring large muskies to take angler bait, according to results published May 28, 2014, in the open access journal *PLOS ONE* by Mark Vinson from U.S. Geological Survey and Ted Angradi from U.S. Environmental Protection Agency.

Previous studies have suggested a relationship between the moon and fish behavior. To investigate this further, scientists analyzed angler catch records for evidence of an effect due to the lunar cycle and explored sources of its variation on fishermen's catch. They analyzed angling catch records for ~ 350,000 muskellunge (largest member of the pike family) from North America to test for a cyclic lunar influence on angler catch.

Researchers found that the number of fish caught consistently related to the lunar cycle across most fisheries. Anglers caught more muskellunge around the full and new moon than at other times, and an angler fishing exclusively on the peak lunar day would catch on average 5% more muskellunge than anglers fishing on random days. Scientists could not rule out the possibility of increased angler effort during the lunar cycle, but several other indicators suggest that biological factors in the fish may contribute to the synchronization. For example, the lunar effect was stronger for larger muskellunge (>102 cm), fish caught in higher latitudes, and for fish caught in midsummer, rather than in June or October. Scientists posit that these variations reflect lunar synchronization in feeding activity and are not due to increased angler effort.

Mark Vinson added, "Our findings give statistical support to what many anglers have believed for a long time, that the moon matters – we are not sure exactly why, but it matters. Muskellunge are notoriously difficult to catch, so anglers will appreciate any edge they can get."

More information: Vinson MR, Angradi TR (2014) Muskie Lunacy: Does the Lunar Cycle Influence Angler Catch of Muskellunge (*Esox masquinongy*)? *PLoS ONE* 9(5): e98046. [DOI: 10.1371/journal.pone.0098046](https://doi.org/10.1371/journal.pone.0098046)

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