

The Super-Sonic Pistol Shrimp and Bethlehem Ephrathah

The alpheididae family, often called the pistol shrimp, earns its name from the loud popping noise that it can generate with its large claw. A pistol shrimp has two claws, one small one and one large one that can grow to be up to half its body size. This large claw is made up of two parts. The first, called the "hammer", is a joint that allows one side of the claw to open fully to ninety degrees and lock there, creating tension that is released when it slams down with force into the other half of the claw. This impact generates a stream of bubbles that is strong enough to stun or kill much larger organisms. There is so much energy produced by this impact that when the bubbles break they reach temperatures almost as hot as the surface temperature on the Sun (5,500 degrees Celsius). Furthermore, the pistol shrimp is one of only two known species that can create "sonoluminescence", the generation of light due to the energy release of bubbles in a liquid. If a pistol shrimp loses a claw a biological reaction is triggered that causes the other claw to grow to be the "pistol" claw, while a small claw re-grows on the other side.

It is widely known that Bethlehem, a little hamlet near Jerusalem in Israel, is the birthplace of Jesus Christ, but did you know that His birth there was prophesied around 700 years beforehand? In Micah 5 verse 2 it is written "But you, Bethlehem Ephrathah, though you are little among the thousands of Judah, yet out of you shall come forth to Me the One to be Ruler in Israel, whose goings forth are from of old, from everlasting." The prophet Micah introduces himself in chapter 1 and verse 1 as having lived during the reigns of kings Jotham, Ahaz, and Hezekiah, who all lived between 750 and 700 BC. That means God foretold the birthplace of the Saviour around 700 years before He was actually born.