

Quote: “Living things are based on a universal genetic code. The information coded in DNA forms an unbroken chain that stretches back roughly **3.5 billion years.**” [emphasis added]

Question: What is the **evidence** ? Has DNA been observed to survive in any fossils that old? (No)

---

*Ref: <http://www.popsoci.com/science/article/2013-02/whats-half-life-dna>*

First, the scientists extracted and measured the amount of DNA in 158 tibiotarsus leg bones of extinct moa, 12-foot, flightless birds that once roamed New Zealand. Next, they used radiocarbon dating to calculate the ages of the bones, which ranged from about 650 years old to 7,000 years old. With that data, the scientists calculated the hereditary molecule's half-life: about 521 years.

The rate, however, isn't slow enough for humans to take blood from an amber-encased mosquito and clone dinosaurs, like in Jurassic Park. "We believe this is the last nail in the coffin," of claims that scientists can get DNA from million-year-old fossils, says Morten Allentoft, a scientist from Copenhagen's Natural History Museum who worked on the project. Even in ideal preservation conditions, the scientists calculated that every single DNA bond would be broken at 6.8 million years:

The youngest dino fossils are 65 million years old. And because scientists need long stretches of DNA to replicate it, they estimate that the oldest usable DNA will actually be one to two million years old. The record holder right now is DNA found in ice cores, at 500,000 years old. The oldest actual DNA samples hail from Greenland (the icy one, as opposed to Iceland, the green one), extracted from beneath a mile of ice, a “perfect, natural freezer” for DNA preservation. The 450,000 to 800,000-year-old samples provide evidence of green life on the now largely barren landmass.