

# Study throws dog domestication theories to the wolves

July 18 2017, by Laurence Coustal

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The tiny chihuahua traces its roots to a single group of wolves that crossed the path of humans as long as 40,000 years ago, researchers say

From the tiny chihuahua to the massive Saint Bernard, domestic dogs today trace their roots to a single group of wolves that crossed the path of humans as long as 40,000 years ago, researchers said Tuesday.

Their findings are bound to reignite the scientific disagreement over

when, and where, "man's best friend" first split from its wolf ancestor.

One school of thought maintains this happened in Europe around 15,000 years ago, another said it happened in central Asia or China about 2,500 years later.

Last year, a study in the journal *Science* said domestication happened from two separate wolf populations, one in Europe and the other in Asia.

The authors of the latest report said their DNA analysis shows that ancient [dogs](#) first split from wolves around 40,000 years ago, likely triggered by the presence of humans. The team cannot say where in the world this happened.

The process of dog domestication was probably a "passive" process, they added.

Rather than humans actively taming wild wolves, it would have started with the animals approaching hunter-gatherer camps in search of food.

"Those wolves that were tamer and less aggressive would have been more successful at this" and more likely to befriend humans, explained the researchers.

These were not dogs as we know them today—they rather resembled "village dogs" which roamed freely, did not live in specific people's homes and scrounged for food.



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## **Fossils shed light**

By 20,000 years ago, said the team, the first dogs split geographically between Eastern and Western canines.

The first gave rise to East Asian dogs, and the other to dogs in Europe, central and south Asia, and Africa.

"By... 7,000 years ago, they (dogs) were pretty much everywhere, including North America," study co-author Krishna Veeramah of Stony Brook University in New York, told AFP.

The European dog of that period is the one that went on to father most modern dog breeds found today, the researchers concluded.

The team relied on the fossilised DNA of two dogs dug up in Germany—7,000 and 4,700 years old—which they compared to modern hounds.

The fossils came from the Neolithic period, the closing chapter of the Stone Age, when [prehistoric humans](#) first tried their hand at farming and building permanent villages.

Last month, another DNA study said the first cats were also tamed during this time.

The first wildcat to travel abroad, and the forefather of domestic cats today, was *Felis silvestris lybica*—a small, striped Middle Eastern subspecies that went on to colonise the entire world, that study found.

The mother (or father) of all cats is thought to have travelled to Europe by ship from the region of Anatolia around modern-day Turkey 6,000 years ago.

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