

Dog Tips

5 Beloved Dogs You'll Never See Again

They were popular once upon a time, but no matter how hard you search you won't find one today — only similarities in contemporary breeds. So what caused them to vanish without a trace?

Reviewed by Dr. Becker

STORY AT-A-GLANCE

- The debate among scientists and geneticists as to the origin of dogs rages on
- Some researchers believe dogs first separated from wolves in the Middle East; others believe it happened in Europe
- One of the latest published studies suggests dogs originated in Southeast Asia and split from wolves around 33,000 years ago
- Throughout history, many dog breeds have come and gone
- Some disappeared when the work they were bred to do was no longer needed

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There's an ongoing debate among scientists and geneticists as to the origin of dogs — specifically, when and where they first split off from their wolf ancestors. Some experts believe dogs first separated from wolves in the Middle East, but others are sure Europe was the spot.

However, a genetics expert at Sweden's KTH Royal Institute of Technology, Peter Savolainen, Ph.D., is adamant that dogs split from wolves about 33,000 years ago in Southeast Asia.

Savolainen and a large international team of scientists from China, Canada, Finland, Singapore, Sweden and the U.S., published the results of their latest study in the journal Cell Research.¹

Study Suggests Dogs Originated in Southeast Asia

The type of DNA analysis used in studies of the origin of canines is apparently at the root of the controversy. Savolainen has based past studies on analysis of mitochondrial DNA, while other researchers use nuclear DNA to refute his findings.

Savolainen maintains competing studies were based on data that didn't include canid DNA samples from Southeast Asia, which is why those researchers arrived at the conclusion that dogs originated in the Middle East, Central Asia or Europe — not Southeast Asia.

For the study, Savolainen and his colleagues analyzed the complete nuclear genome of a worldwide sample from 46 dogs and 12 grey wolves, including samples from southern China and Southeast Asia.

Of the 46 dogs, 12 were indigenous dogs from the north Chinese countryside, 11 were from Southeast Asia, 4 were village dogs from Nigeria and 19 were purebreds from Asia, Europe and the Americas, including the **Afghan Hound**, the **Siberian Husky**, the Tibetan Mastiff, the Chihuahua and the German Shepherd.

"We then found out that dogs from Southeast Asia stand out from all other dog populations," explained Savolainen, "because they have the highest genetic diversity and are genetically closest to the wolf."

Dogs Split from the Wolf About 33,000 Years Ago

According to Savolainen, these results provide solid evidence that the dog originated in Southeast Asia, which reinforces his earlier studies using mitochondrial DNA.

"We also found that the global dog population is based on two important events," says Savolainen, "The dog and wolf populations first began to split off about 33,000 years ago in Southeast Asia. The global spread of dogs followed about 18,000 years later."

Savolainen theorizes the split between dogs and wolves might have occurred when the wolf population divided and south Chinese wolves evolved into dogs. If that's the case, then the global spread of dogs out of Southeast Asia is tied to domestication. The study authors write:

"Our study, for the first time, begins to reveal a large and complex landscape upon which a cascade of positive selective sweeps occurred during the domestication of dogs. The domestic dog represents one of the most beautiful genetic sculptures shaped by nature and man."⁴

5 Extinct Dog Breeds

Throughout history, many dog breeds have come and gone. Some disappeared when the work they were bred to do was no longer needed. Others gradually morphed into easily recognizable modern day breeds. Here are just a few examples:

- 1. **Alpine Mastiff** The extinct **Alpine Mastiff** is an ancestor of today's Saint Bernard, and a significant contributor to the modern Mastiff and other closely related breeds.
 - The names Alpine Mastiff and Saint Bernard were used to describe the same group of dogs in the early 19th century. The Alpine Mastiff was one of the earliest giant dog breeds and one of the first true mastiffs, originating in Northern Europe before 500 B.C.
 - It is believed some of these dogs reached nearly 40 inches at the shoulder and weighed as much as 350 pounds or more larger than both the modern Saint Bernard and English Mastiff.
- 2. **Chien-gris** The extinct **Chien-gris**, also known as the Gris de Saint-Louis (Grey St. Louis Hound), originated in medieval times. The breed was known to be headstrong and willing to pursue quarry to their death. By the 19th century, the Chien-gris was impossible to find.

- 3. **Dogo Cubano** The extinct **Dogo Cubano**, also known as the Cuban Mastiff, originated in Cuba. This rare breed was developed from several varieties of bulldogs, mastiffs and cattle dogs. The Dogo Cubano was bred to capture runaway slaves (cimarrones) in Cuba. After the abolition of slavery, the breed ceased to exist.
- 4. **Russian Tracker** The extinct <u>Russian Tracker</u>, also called the Russian Retriever, was a domestic dog used for hundreds of years to protect and herd flocks of sheep. The Tracker stood as high as 30 inches at the shoulder and weighed up to 100 pounds or more. Despite their size, these dogs were fast and flexible, able to defend their flocks from wolves and other predators. The Russian Tracker was also an intelligent dog. His closest surviving descendant is the <u>Golden Retriever</u>.
- 5. **Tahltan Bear Dog** The probably extinct <u>Tahltan Bear Dog</u> was indigenous to Canada, and was bred to hunt bear. Small and light, these dogs could move quickly over packed snow following bear tracks. The Tahltan Bear Dog was friendly and gentle with people and small animals, and lived in tents with their humans.

There are no known living descendants of the breed past the 1960s to 1970s, and no modern breeds have any known genetic relationship with the Tahltan Bear Dog.

Sources and References

The Guardian December 15, 2015

1,4 Cell Research, Volume 26, Pages 21–33 (2016)

^{2,3} ScienceDaily, December 16, 2015