

Domestication and its possible consequences

Man has known the use of fire for as long as 750,000 years – or about half the entire time Homo Sapiens has existed. From this, we might expect a development that makes us at least *somewhat* nutritionally dependent on cooked food. However, modern science strongly supports the notion of humans being *frugivores*: monkeys that are built to live mainly on fruits as their main source of food.¹

Domestication of the wolf, however, is of much younger date. Most sources estimate the time to be around 15,000 years ago, based on archaeological finds.

Newer research using DNA technology suggests that the time could be as far back as 100,000 years ago². However, this is assuming that domestication started a distinctive path of evolution, with domesticated wolves being completely isolated from wild wolves. If indeed back-breeding with wild wolves to the domesticated wolves continued to take place after initial domestication, this would make the DNA results appear much larger than what they should – which is exactly what they do...

Comparing this to the general trouble an owner of an unsprayed bitch has in preventing strange males from breeding with her, I personally consider it totally inconceivable that wild male wolves would abstain from mating with a domesticated female in "season"; they can smell her miles away. In Scandinavian languages, the bitch's oestrus period, directly translated to English, is called the "running time" – clearly indicating that, in this period, she is definitely inclined to leave home for hours on end and come back as if nothing happened - and give birth to a litter of puppies about 60 days later ...

This is even more likely when we consider the picture of an elderly and lonely wolf that has left the pack and is now trying to fend for itself through scavenging. Following humans on their hunting trips and doing some serious investigation of what they leave behind could very well make such a wolf stay alert in close enough proximity to a human tribe so it can seize the opportunities that are offered to contribute genetically to slowing down the domestication process...

¹ An interesting overview of this is given by Art Baker in "**Biological Adaptations**" at <http://www.iol.ie/~creature/BiologicalAdaptations.htm>

² This is another aspect of Robert K. Wayne's research, as previously referred to. An excellent overview of these genetic studies is given on-line by Florida International University on their [Wolfdog site](#). Another good reference to a layman's understanding is [Florida Lupine Association](#).

Mogens Eliassen:
"The Wolf's Natural Diet – a Feeding Guide for Your Dog?"

When evolution can go fast – Belyaev's foxes...

Another observation that strongly supports the hypothesis of the domestication not starting 100,000 years ago but much more likely only 15,000 years ago comes from a totally different angle.

I am referring to Dmitri Belyaev's studies, which were started in 1940 in Siberia on silver foxes, based on his quest for answers to what impact domestication would have on a species. Belyaev bred some 10,000 foxes over the years – so the experiment was not "small scale", but has some serious statistical value. He selected foxes in his breeding based on one criterion only: *friendliness to people*. Out of each litter, he chose those that were the least resenting to humans, those that were less scared and less inclined to avoid closeness to people³.

After a few generations, Belyaev saw some significant changes – the foxes were already at the point where several of them not only tolerated human contact but even sought it!

After 18 generations, Belyaev could report that all his "domesticated" foxes now shared some of the very same features we know make dogs different from wolves!

Those features included:

- Curly tails
- Ears no longer totally upright – many kip-ears and drop ears
- Shorter snout
- Patchy coat
- Enjoying human contact and petting.

(To be continued)

³ Dmitri Belyaev's work was continued by Lyudmila Trut in Novosibirsk, Russia. For further reference, you can go to <http://www.exn.ca/Templates/Story.cfm?ID=1999033055>.

Another, more user-friendly, discussion of the domestication is given by Jessie Zgurski and can be found at <http://canidae.ca/dog.htm> - the site contains a lot of valuable links to additional information – a good place to start digging...