

When is a Dog a Wolf... OR A WOLF A DOG?

by
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Simply put, the dog is a domesticated wolf. The operative word here is "domesticated." Dr. Robert K. Wayne, canid evolutionary biologist and geneticist at the University of California-Davis, came to the following conclusion regarding the genetic relationship between wolves and dogs: "Dogs are gray wolves, despite their diversity in size and proportion" (Wayne, 1993). Furthermore, genetic studies show that "[t]he domestic dog is an extremely close relative of the gray wolf, differing from it by at most 0.2% of mtDNA sequence.... In comparison, the gray wolf differs from its closest wild relative, the coyote, by about 4% of mitochondrial DNA sequence" (Wayne, 1993).

This and other genetic studies have resulted in the reclassification of the dog from *Canis familiaris* to *Canis lupus familiaris* in *Mammal Species of the World* (Wilson & Reeder, 1993), a book published by the American Society of Mammalogists and the Smithsonian Institution in Washington, D.C. and the primary accepted reference on the mammal species of the world. Although the reclassification of the dog is supported by genetic and a wide variety of other evidence, it has caused some confusion. The dog is technically not a subspecies of gray wolf, sharing equal status with the timber wolf (*Canis lupus occidentalis*) or the arctic wolf (*Canis lupus arctos*); rather, population geneticists tend to view it as a domestic variant of the wolf:

The use of subspecies names to describe geographic variants does not fit very well as a description of domesticated forms. 'Variant' probably is a good term to use. Some domesticated forms have been so modified that they are...considered to be full species (albeit human-created ones).... However, domestic dogs can certainly interbreed freely with wild wolves. To make things a bit more confusing, dogs have been domesticated a few times, so that domestic breeds are more closely related to some wolves than they are to some other domestic breeds. Hence, a subspecific name for domestic dogs could be especially misleading. (Pollak, 2000)

DOG: THE DOMESTIC WOLF

It is a popular belief that as mammals grow, they also develop; however, this isn't entirely accurate. Wild wolves pass through several well-defined stages in life, from the fetus to the neonate to the juvenile and finally to the adult stage. Like human teenagers, young wolves in the juvenile stage vacillate between behaviors specific to neonates and behaviors specific to adults. However, a dog's mental and emotional development does not progress past the juvenile stage. This phenomenon is called neoteny and is defined as the process whereby an animal's development is arrested prior to the animal becoming an 'adult'. In other words, the domestic dog retains its 'juvenile' emotional and mental characteristics into 'adulthood'.

Because wolves progress to the adult stage and leave the neonatal and juvenile stages behind in the maturation process, they are naturally more developed

than dogs. They have a stronger self-preservation instinct and a "more rapid cognitive development than ... dogs" (Frank & Frank 1982).

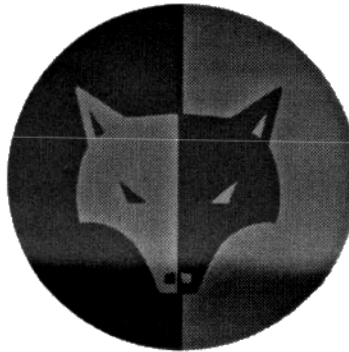
On the other hand, the behavior of adult dogs is arrested at the juvenile stage, allowing them to be able to mix neonatal and adult behaviors, calling on one type of behavior or another as the situation warrants. For example, the dog "solicits care, begs for food, and sits around at a rendezvous point waiting for 'parents' to show up with food [neonatal behavior], and at the same time will eye and chase a

ball [adult predatory behavior]" (Coppinger & Schneider, 1995). Simply put, dog behavior is watered-down wolf behavior.

THE WOLFDOG: A SOURCE OF CONFUSION

The 1990's saw a rapid rise in the public's interest in wolf-dog crosses (henceforth referred to as wolfdogs). As a result of this increased interest, we have seen more and more of these animals being sold in newspapers and online, walking in our parks, and visiting our vet clinics. Unfortunately, many of these animals—whose owners proudly claim that they are wolf "hybrids"—are nothing more than mixed-breed dogs with as much recent wolf ancestry as Golden Retrievers.

On the flip side, many wolfdog owners intentionally portray their animals as dogs. Sometimes this is done to avoid possible legal repercussions of wolfdog ownership. However, most often this misrepresentation of wolfdogs as dogs is done to minimize problems that can arise when trying to get their animals vaccinated for rabies. Currently, wolves and wolfdogs are not approved for rabies vaccination and, while health departments



often encourage vaccination, some veterinarians erroneously believe that the lack of approval means that the vaccine will not work on wolves and wolfdogs.

With the misrepresentation of dogs as wolfdogs and the misrepresentation of wolfdogs as dogs, is it any wonder that veterinarians, Animal Control personnel, and average citizens find it difficult to determine what is or is not a wolfdog?

PHENOTYPING WOLFDOGS

Florida Lupine Association (FLA) is often called to evaluate animals in Animal Control shelters, Humane Society shelters, and veterinarians' offices. This identification process is called phenotyping, which is the science (or art) of determining the wolf content in an animal—if any—based upon its looks and behavior. Because it is not an exact science, phenotyping can be very difficult to perform with any accuracy. However, since there are no conclusive genetic tests that can determine if an animal is a wolf, dog, or wolfdog, phenotyping is the next best thing.

Unfortunately, veterinarians or shelter workers unaccustomed to dealing with wolves and wolfdogs on a regular basis—and untrained in phenotyping wolves and wolfdogs—will sometimes erroneously label a dog as a wolfdog. This is a problem encompassing all of North America. For example, in 2000, Animal Control officers confiscated and destroyed a Texas man's champion malamute because a neighbor had complained about the "wolf" next door; though wolfdogs are legal to own in Texas, they were illegal in his county. The case was settled out of court.

In August 2001, Dwayne Gauthier lost his pet Siberian Husky due to a similar erroneous determination. Three weeks after his dog, Kiley, had escaped from his yard, Gauthier received word that someone had found her a week earlier and had turned her over to the town's Animal Control. When Gauthier tried claiming his dog, he learned that Animal Control had declared it a wolf and had contacted Alberta (Canada) Environment officers. After searching Kiley for a tag or tattoo and finding none, the Environment Officers concurred with Animal Control and decided that, as a wolf, she should be 'released' back into the wild. Alberta Natural Resource Services officer Stuart Polege explained to the press that Kiley was mistakenly released into the wild approximately 15 miles from Edson, Alberta. Gauthier never found his dog.

Fewer mistakes might be made pertaining to wolfdogs if those who specialize in these animals—wolf sanctuary owners, Fish & Game personnel, and/or wolf and wolfdog organizations—are contacted to verify that an animal is or is not a regulated wolfdog. Although phenotyping is not an exact science, it is the best avail-

able method for identifying wolfdogs—but only when performed by those experienced in phenotyping these animals.

FLA can be a useful resource for help in evaluating possible wolf heritage, and is willing to assist if requested.

For assistance or for more information about wolves and wolfdogs, email FLA at info@floralupine.org or FAX to 941-629-0761. For more information about wolfdogs or to download free educational materials, visit our website at www.floralupine.org. FLA also publishes a quarterly newsletter and would be happy to add any FACA member to the mailing list.

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While FACA is always willing to print informative articles from all points of view, it is our duty to remind our members that FACA's Policy Statements reads: "Wolves or wolf-hybrids - FACA is opposed to the keeping, breeding, or selling of wolves or wolf-hybrids. They are unsuited as family pets due to the large number of human fatalities associated with their keeping. Additionally, there is no approved rabies vaccine available for these animals."

