

**Social Behavior of Domestic Dogs and Cats  
as Compared to Wild Canine and Feline Species**

**An Honors Thesis (HONRS 499)**

**by**

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## **Abstract**

With the help of animal behavioralists, parallels have been drawn between domestic dogs and cats and their wild cousins. In some respects, social behavior in domestic animals has remained similar to characteristics found in wild animals. General observations of social conduct have been examined. By identifying social patterns that exist in both wild and domestic animals, a more detailed knowledge of pet mannerisms has been acquired.

## **Introduction**

Humans have been entertained by the playful antics of our domestic cats and dogs for countless decades. We enjoy seeing our pets stalk a neighborhood squirrel or tirelessly mangle an unfortunate "chew" toy. We classify these acts as mannerisms that pets have acquired due to environmental influence. But do we truly understand the underlying reasons behind such behavior? Have we considered the relationships between domestic animal behavior and behavior exhibited by certain wild canine and feline species? Upon close examination, incredible similarities between our pets and their wild cousins can be noted.

## **Comparison of Social Behavior in the Domestic Dog with His Wild Cousins**

With the exception of certain atypical species such as the red fox, most wild canine species exhibit cooperative behavior. This means that two or more animals of any given species cooperate to rear young, forage, achieve matings, or defend against predators (Gittleman, 164). Cooperative behavior is contrasted with solitary behavior in which individuals coexist but do not partake in all of the aforementioned life practices. Advantages to both lifestyles may be argued.

Because most canine species exist in groups, a highly structured social arrangement is identified. Functional aspects of grouping can be classified based upon general behaviors. With wild species, groups can be arranged according to feeding, foraging, breeding, or population patterns (Gittleman, 183).

Within households of domestic dogs, these grouping tendencies are not easily noticed. Social organization of two or more dogs confined to one household is often limited to hierarchial arrangement in which one dog exhibits dominance over the others. But what is the result when different households of dogs are allowed to interact? More specifically, what wild-like characteristics are identified

in domestic dogs when they venture outside of their normal, human-interrupted habitat? In order to evaluate this question, I feel that it is necessary to reflect upon my own experience with household pets. In particular, examination of the life of Boots, our family's female springer spaniel-mix, helps to clarify this topic.

My dad and I purchased Boots for a very small sum from a neighbor who was probably willing to give her up without payment. Boots was the product of an unwanted, mixed breed pregnancy, and fortunately for her, my dad felt that mixed breeds made the best pets.

Boots was brought into our household and given as much love as any pet can imagine. She spent most of her life as an indoor dog, but she was always given uninhibited exposure to the outdoors. Because our house was located near a heavily wooded area, Boots was given a large range with which to conduct her normal dog-like activities. She was an extremely friendly animal to both man and beast. We were never afraid of her causing problems in the neighborhood.

Because Boots was our only pet, interaction with humans was her primary source of social contact. She ate, slept, and played whenever her human friends did. She was definitely a domesticated animal. That is, until a strange dog appeared in the back of our yard one day.

I was never sure whether this dog had a human family, but judging by his anti-social attitude whenever a human approached, it is likely that he survived on his own. He was

a large shepard mix and seemed only slightly malnourished. Although his appearance was not indicative of a "wild dog", his behavior certainly exemplified "wild dog "characteristics". During the day, he ventured into our yard no closer than the edge of the woods. At the sight of any human, he would retreat to the woods and not return until human presence no longer threatened.

Because Boots was such a sociable creature, she instantly made friends with this strange new dog. My family and I were somewhat reluctant to allow Boots to socialize with this animal. After several failed attempts to prevent interaction between the two, we were forced to allow the relationship to continue.

This new dog completely changed Boots. Since the arrival of "the delinquent", as we jokingly called him because of his negative influences, Boots developed into an uncivilized and uncontrollable animal. She was obsessed with this new creature. She would disappear for days, only to show up late at night exhausted from her lack of food and rest. She would eat a little, then sleep for a short period of time and disappear again with this dog the following morning. We had no explanation for her instant willingness to segregate from her caring, human family in order to gallivant around with "the delinquent".

As these two dogs began to spend more time together, I became more interested in their activities. I knew there was no sexual relationship since Boots had been spayed at

six months of age. However, there was mutual respect that seemed to join these two animals in a common bondage.

I can remember being awakened one night by the sound of whimpers and quiet barks outside of my bedroom window. Boots, who had been inside at the time, had also heard these sounds. She came to me begging to be let outside as if she knew the purpose of the odd noises. After letting Boots outside, I then realized what was happening. "The delinquent" had been circling our house calling for boots to come out and join him. He knew that she would come if he were persistent in his calling. Although this incident seemed odd to me, it helped me realize the strength of the bond between these two animals.

After two weeks, nothing changed between the two dogs. Boots would occasionally bring home mutilated carcasses of various rodents and other small mammals that had probably been the product of a joint kill. Neither of the dogs possessed extreme speed or agility, so a combination of efforts proved helpful in their hunts. For "the delinquent", the hunts were vital for survival. For Boots, they represented a pleasurable way to help the life of her newly found companion.

When "the delinquent" failed to show up for three straight days, we assumed that he had either been killed by an angry neighbor, or he had fallen victim to an automobile. The fact remained that this wild animal had disappeared, and Boots was left without her companion.

Although she showed no signs of grieving, she was seemingly trapped in a state of confusion for several days. She would venture into the woods by herself, but she would always return much sooner than when she travelled with "the delinquent". As days past, she made fewer trips into the woods. Eventually, she made no trips at all. To the delightment of her human family, she began to transform back into the loyal canine that we loved so much. As quickly as she had devoted her life to the wild, she had now returned to a life filled with human love and companionship. To this day, Boots remains as a pet dedicated to her family.

Similar cases of domestic dogs returning to "the wild" have been documented. In her book Hidden Life of Dogs, Elizabeth Marshall Thomas (1993) cites several instances of wild-like qualities in domestic dogs. She tells of the story of Misha who ventures outside the confines of human civilization.

This instance in Boots's life may not be exemplary of most domestic dogs, but it does indicate the uncivilized characteristics that are still present in the modernized members of the canine family. The evolutionary processes that have produced the domestic dog have not completely removed the social grouping tendencies found in most canine species. Humans must realize that dogs are animals that have a social desire to interact with animals of their own kind. Although humans have trained pets to respond to human vocal commands and hand gestures, there is strong certainty that dogs respond best to messages from other dogs.



**The Domestic Cat- Social Animals  
that Exhibit Solitary Behavior**

Contrary to the cooperative behavior exhibited in most canine species, most feline species tend to lead solitary lives. This means that they never, except when mating, cooperate with conspecifics (Gittleman, 164). Solitary is not the opposite of social since most mammalian species regularly interact with conspecifics. With the exception of the African lion and the cheetah, all wild felines live solitary lives.

Solitary behavior exists in animals who hunt prey much smaller than themselves. Energy exertion is minimized during hunting because prey size limits energy input. A second cause for noncooperative living is the absence of male parental investment (Gittleman, 168). In species that exhibit solitary behavior, males play no role in the rearing of young. Both of these causes of solitary behavior are identified in domestic cats, but it is important to further analyze the intricacies involved with this behavior.

There are no parallels between sterilized cats that remain indoors at all times and the two characteristics associated with solitary lifestyles. These cats depend on their human owners for food, and they have no reason to invest energy into reproductive or foraging practices.

However, when comparing domestic cats and dogs, it is quite evident that domestic cats are much more independent. On more than one occasion when dealing with cat owners, I have heard the remark, "We like having cats. They pretty much take care of themselves." (anonymous)

In the wild, cats of solitary nature rarely come in direct contact with one another except for breeding purposes. Direct contact is unnecessary because visual, auditory, and olfactory signals generally serve as means of primary communication (Mellen, 163). These signals often indicate territorial boundaries or mating regulations. Examples of these behaviors include urine spraying or claw scratching (Mellen, 159).

Domestic cats frequently demonstrate similar behaviorisms. As owners of cats that have not been neutered or declawed can testify, household cats can make a habit of marking indoor territory at the expense of sometimes valuable furniture. The frequency of such markings is often magnified with the addition of more than one house cat.

What do territorial markings have to do with the solitary nature of this animal? Solitary cats feel it necessary to mark all facets of their environment. Cat owners often analyze cheek and head rubbing as a cat showing affection to its human owner. In fact, those loving rubs are ways for the cat to mark its territory because the animal considers humans as a part of its environment (Leyhausen, 217). Cats smell the area of contact before each rub to estimate the

quantity of scent that must be added. Cat owners will notice that the rubs occur more frequently when the owner has entered the house after extended periods of time.

Domestic cats that have been born into confined habitats such as households have no reason to create territorial boundaries. However, most domestic cats show territorial behavior in different ways. Qualities such as scent marking and other innate behaviorisms develop in all cats under instinctive circumstances (Ricciuti, 185).

Despite the fact that domestic cats have adapted so well to human existence, evolutionary heritage gives them instinctive reason to remain as somewhat solitary animals. However, social interaction with humans has lead domestic cats to depend on humans in a cooperative manner. According to Dr. Robert Williams, there is a significant reason for modification in the behavior of domestic cats (Bladeslee, C1). Dr. Williams claims that wild cats and domestic cats develop the same number of brain cells as fetuses, but certain neurons in domestic cats are killed just before birth. The result is presumably that each cat is adapted to fit its environment. According to Dr. Williams, "the immense evolutionary advantages of adapting to different environments by killing off selected brain cells before birth is that the animal retains the ability to re-evolve traits should the world change rapidly" (Blakeslee, C1).

## **Social Interaction Between Domestic Dogs and Cats**

Social behavior of domestic cats and dogs is not limited to interaction with members of the same species. Many households contain both animals resulting in forced coexistence. A conventional notion concerning relations between dogs and cats is that these animals are natural enemies. However, upon closer examination, mutuality may also be achieved when these pets share a common habitat.

In the wild, habitats of certain canine and feline species often overlap. Mutualism between the two is rare. In fact, species such as mountain lions and coyotes share common prey resulting in competition (Brewer, 238). Competition does not indicate that two species are enemies. However, territorial overlap frequently results in mountain lions killing coyotes (Koehler and Hornocker, 391). In the same study, bobcats were killed for the same reason. These results do not indicate a particular hatred between canines and felines, but confrontation is an inevitable consequence when competition exists.

Within the population of domestic pets, prey overlap is not probable. Most dogs and cats do not share the same food source. Territorial reasons may provide answers to questions involving dog and cat confrontations. Dogs love

to chase cats because they are viewed as intruders onto a dog's domain (Braun, 24). Cat attacks on dogs are rare but may result when a cat is provoked.

Once again, I feel that it is necessary to reflect upon my experiences with dogs and cats in order to clarify this idea. While working as a veterinary technician, I witnessed an event that completely changed my impression of dog and cat confrontations.

A small calico cat was brought into the vet's office after falling victim to a dog attack. Apparently, two boxers had attacked the cat after the unfortunate animal had wandered into the dogs' yard. The injuries were serious but not critical.

While waiting in the reception area, the cat noticed a dog who had also been waiting to see the doctor. To everyone's surprise, the cat leaped from its owners arms and attacked the dumbfounded canine. After a brief scuffle that had been completely instigated by the cat, the two animals were separated. Witnesses to this event, myself included, were left utterly speechless. Even more amazing than the attack itself was the fact that the dog in the waiting room had also been a boxer.

There seems to be one reasonable explanation for this odd occurrence. The cat may have felt that the boxer was one of the two dogs that had participated in the earlier attack. It is unclear as to whether the cat felt threatened by this innocent dog or was erroneously seeking

revenge against its assailant. Perhaps, the boxer in the waiting room smelled like the boxers that made the attack. Nonetheless, this event was certainly atypical.

The traditional view of cats and dogs as enemies is frequently contradicted in households containing both animals. Tolerance of one another is generally achieved with time (Braus, 25). Typically, cat and dog relationships benefit most when animals are exposed to one another at an early age.

## **Human Relationships with Wild and Domestic Animals**

Whether ancestral genes have provided for solitary behavior in domestic cats or cooperative behavior in domestic dogs, adaptation to human family life has prevailed in both animals. Because dogs and cats exhibit different social behaviors, comparison of companionable qualities is unjust. The fact remains that both animals are capable of developing personal relationships with people.

Scientifically acceptable theories for the domestication of cats and dogs are still unclear. However, several hypotheses exist. Since domestic dogs and wolves are nearly identical in genetic makeup, some theorists believe that wolves were first brought into captivity to be tamed and provide protection against enemies (Coppinger and Feinstein, 122). Species variation then resulted through years of evolution. Domestic dog behavior such as "barking," which is nonexistent in wolves and coyotes, helps support this idea. Early "dogs" were also suspected of scavenging upon human habitation. Therefore, the wild ancestor of the dog may have largely domesticated itself, allowing for adaptation to human existence (Coppinger and Feinstein, 124)

Domestication of the cat was developed quite differently than the dog. Cats were probably domesticated about five thousand years ago in Egypt. The Egyptians were known to have a special reverence for felines (Ricciuti, 215).

In 1991, 37 percent of American households owned at least one dog. At the same time only 31 percent of households owned a cat (Coppinger and Feinstein, 120). Because dogs require a larger living space, homeowners are more likely to have dogs. Cats adapt better to busy lifestyles because they are quite capable of taking care of themselves (Braus, 24).

Within recent years, a growing number of people have attempted to raise wild animals as pets. Opinions vary as to whether this is a good idea, or not. Proponents argue that, when trained properly, wild dog and cat species are less aggressive than some breeds of domestic dogs and cats (Oakley, 35). Historically speaking, domestication of wild animals was probably not achieved without some human injury. Even today, domesticated wild animals are frequently responsible for attacks on humans.

These factors may all be true. Unfortunately, captive breeding of wild animals does not ensure that progeny will completely adapt to human interaction. As wild animals mature, they frequently become aggressive and unpredictable (Rowley, 14). Greater danger exists with wild animals because they possess startling strength, and they are generally larger than the standard domestic pets. A playful swipe from a lion can easily injure someone.

The aggressive nature of wild animals is not the only reason that they make poor pets. Domestic dogs and cats provide loving companionship while developing mutual respect



with their human owners. This respect is achieved through hours of close human contact. When humans attempt to domesticate wild animals, fear of aggression often limits this contact. As a result, behavior that is seen in our pets is often absent in wild animals found in captivity. "Your wolf pup won't roll over, and your bobcat never purrs," says Terry Jenkins, head keeper of the Folsom City Zoo in California (Rowley, 14).

The fact remains that incredible similarities exist when comparing social behavior of wild and domestic animals. Once bewildered by certain odd mannerisms noticed in our domestic pets, humans are now able to uncover the reasons behind such behavior. According to animal behaviorist Konrad Lorenz (1990), "truly interesting observations regarding social behavior only arise when you have become directly acquainted with animals." Because of similarities in genetic makeup, domestic dogs and cats remain as animals closely related to their wild cousins. Close human relationships have developed through years of domestication, but our pets still exhibit many behaviors more closely associated with their own family of organisms.

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