

“Enriching the Life of the Sanctuary Wolfdog: Human Interaction as an Overlooked Welfare Strategy”

Paper Presentation by Lindsay R. Mehrkam, M.S.
Department of Psychology, University of Florida
Annual Meeting of the Society for Literature, Science, and the Arts
Milwaukee, Wisconsin
Sunday, September 30, 2012

An Introduction

The focus of my paper deals with the practical extensions of society’s changing views of the wolf – and specifically, with wolfdog’s controversial position in modern society as an exotic pet. I will begin by discussing the wolfdog sanctuary as a laboratory for understanding human-animal relationships – both for theoretical value and for the practical goal of improving the welfare of disposed wolfdogs. I will further examine the behavioral effects of human interaction on wolfdogs housed in sanctuaries, and how these effects are influenced by the behavior of the human. Finally, I will address how a scientific analysis of human-animal interactions – and with the sanctuary wolfdog specifically – can inform us of how we as humans influence the world of these unique nonhumans in both enriching and detrimental ways.

What is a sanctuary? The importance of place and the environment on the human-wolfdog relationship

In the scientific study of behavior, we often emphasize the importance of our environment in understanding why both humans and nonhuman behave as they do¹. In literature or environmental studies, sense of place plays a similarly vital role in understanding personality, behavior, and identity². It seems necessary, then, to spend some time defining a *sanctuary*. We may begin by envisioning the earliest zoos – bleak, desolate, sterile, confinement – are words that tend to come to mind. Although their very nature and existence are still challenged today by animal rights proponents, zoos today are regarded more as conservation institutions subject to increasing regulations, dedicated to education of the public and with high standards of animal care relative to zoos in the past³. Sanctuaries often fall somewhere between the historical and modern zoo, with widely varying standards of containment, animal care, education, conservation, and safety for keepers or staff. We can largely agree, however, that sanctuaries are facilities that aim to provide lifelong care for unwanted animals. Sanctuaries accredited by the Global Federation of Animal Sanctuaries, for example, allow rescued exotic animals to live out the rest of their lives in peaceful, spacious, natural habitats with conspecifics and abstain from breeding or selling their resident animals.⁴

The most obvious objective to containment of an animal in captivity is restriction of freedom (in extreme cases, even going so far as to equate this with erotic entertainment or pornography)⁵. On a more tangible level, this restriction of freedom may result in declining behavioral welfare⁶. This is often characterized in terms of both degradation of

species-typical behaviors that animals would normally perform in the wild but are not given opportunities to perform in captivity⁷; but also, the expression of artificial, abnormal, or stereotypic behaviors often characterized as due to frustration or stress stemming from the inability to express their natural or instinctual behaviors⁸. These concerns are present, even in the very best of captive institutions, and are relevant to the sanctuary wolfdog, as I will discuss later.

Scientific explorations of human-animal relationships.

A practical concern among sanctuaries is the role of the nonhuman animal in human society. The mission statements of various wolfdog sanctuaries range from complete banishment of private ownership of the wolfdog to openly adopting out certain wolfdogs to homes they judge adequate. I argue that this concern is symptomatic of anthropocentrism. The question being asked is: Are we owning wolfdogs for our enjoyment – whether as a status symbols, companions, or pets – or is our interest in them truly for their best interests?

I would argue that this same practical issue can be identified in scientific explorations of human-animal relationships and interactions. Although a relatively recent area of scientific investigation, the study of human-animal relationships has experienced rapid growth over the last two decades – particularly with respect to more applied questions regarding the nature of human-animal interactions. One of the best known areas of such research is animal assisted therapy, which has involved a variety of nonhuman taxa, including equines⁹, domestic dogs¹⁰, and cetaceans¹¹, for the purposes of improving human wellbeing. Traditionally, such human-animal relationship research has focused on the benefit of such interactions for humans. Clearly, this is another example of the problem of anthropocentrism, as such studies rarely consider how do such interactions positively or negatively influence the behavior of the animal. This is the focus of my research - specifically with respect to captive canids.

The Wolfdog as a Research Subject

This brings us to our research subject: the wolfdog. The fact of the matter is that the wolfdog has not been studied adequately (if at all) in science. My interest is specifically in how their absence in scientific thought has contributed to complications of their status in society, and ultimately hinders our understanding of wolfdogs.

Despite legal definitions of the wolf-dog cross as domesticated animal¹², the reality is that wolfdogs are not treated this way in reality. Certainly, environmental conservation and ethics oppose wolfdog breeding practices due to concerns of hybridization within wild, pure gray wolf populations that are already vulnerable or endangered by human encroachment. However, a number of agencies concerned with the welfare of domestic animals also express reservations for the wolfdog, including the ASPCA, the American Veterinary Medical Association (AVMA), and the United States Humane Society. Veterinarians have stated that wolfdogs are controversial animals¹³ - even “biological time bombs”¹⁴. In addition, the USDA remains to approve a vaccine against rabies for

wolf-dog crosses. Whether the motives are due to legitimate public safety concerns or unfounded stereotypes, I argue that the avoidance of the wolfdog in empirical research is greatly to blame for this. Researchers have avoided them because they are neither domestic nor wild, and such imprecision is not looked favorably upon by grant or funding committees upon which much research depends. These are the influences that deter empirical attention to the wolfdog, and though they are not impossible to overcome, they are real. Indeed, much of how misunderstood the wolfdog is in science is a direct reflection of how misunderstood it is in the world.

*Study Objectives*¹⁵

Scientists are often responsible for not only contributing evidence to theoretical questions about their phenomena of study, but also the practical or applied implications of their subject matter as well. The merit of human interaction as an environmental enrichment strategy for sanctuary wolves and wolfdogs is an appropriate scientific question for addressing the theoretical issues of both anthropocentrism in human-animal relationships and the practical welfare concerns imposed by confinement over an extended period of time. To objectively determine whether human interaction offered benefits to wolfdogs, we measured the levels of observable indicators of behavioral welfare – which included species-typical social behaviors, abnormal behaviors, and overall activity levels. The occurrence of these behaviors was compared between conditions in which familiar human caretakers were present and conditions in which these caretakers were absent.

Cue to videos: Imagery of applied animal behavior science (8.5 minutes)

Here I present a visual example of what these experimental conditions looked like. Each experimental session always began a 5-minute initial baseline condition, in which no human interaction was provided. Most wolves and wolfdogs we tested were relatively inactive or exhibited repetitive, stereotypic pacing.

When a familiar caretaker presents herself at the gate of the enclosure, we immediately observe species-typical social behavior in the form of tail-wagging, play-biting, play-face and relaxed motor movements while oriented toward a conspecific. Upon entering the enclosure, we see increased behavioral diversity, in the form of greeting the human volunteer (i.e, human-directed affiliation). A closer look at subjects that showed long durations of conspecific affiliation indicated that they also exhibited social play (including play-chasing and play-wrestling, and this was reciprocal). I should emphasize that these behaviors I am describing are well-cited in studies of canid ethology and observations of behavior in natural habitats, and are thus species-typical. Intervention conditions consisted of one familiar female volunteer entering the enclosure and casually interacting with the subjects. This included both tactile stimulation (petting, touching) and verbal praise if the subjects engaged with her. Volunteers were instructed not to encourage play or social interaction with the subjects, and to not interfere if social play or interaction took place between the subjects during intervention conditions. In addition, we observed increased overall activity levels during human interaction, though as I will

discuss shortly, we must be sensitive to the *types* of activity the wolfdogs engage in as well.

We observed a dramatic change in behavioral diversity and overall activity levels as soon as the volunteer exits the enclosure. Note that the animals do not even lay near each other. At first, I assumed that we saw such a dramatic change in positive social behaviors between these wolves – Sampson and Spirit – in large part because they had an especially strong social bond as siblings and over five years of being housed together.

But quite the contrary, we noticed that these behavioral effects appeared to be contagious across the socialized wolves and wolfdogs throughout the sanctuary. As the volunteer entered one enclosure, the wolves and wolfdogs in the adjacent enclosure began to engage in play-type behavior. The volunteers at Big Oak Wolf Sanctuary are adamant about never “skipping over” an enclosure; the animals thus have a learning history of when they are next in line to receive human interaction.

Peace and Lea are two mid- to high-content wolfdogs at Big Oak Wolf Sanctuary. Often the initiator of the play bout was the subject *not* receiving human attention at that time. This often leads to the onset of a play bout, and leads us to believe more strongly in the role of the human in the wolfdog’s ability to interact effectively in its world.

An important aim of behavioral science is not only to determine what causes behavior change in one context, but also to examine the generality of our findings – to what extent are our findings true with other animals in other settings? When we repeated the same experiment with other wolfdogs at other sanctuaries with *their* familiar handlers, we saw similar behavioral trends. This provides further support to our hypothesis that not only is human interaction beneficial to the welfare of the socialized wolfdog, but that the human presence serves an important influence in the wolfdog’s world with social conspecifics as well.

The data we obtained from human interaction sessions also suggests the importance of promoting behavioral diversity in captive animals. In addition to conspecific affiliation, we also observed social play, scent-rolling and rubbing on caretakers (a communicative but also perhaps an affiliative behavior), and other exploratory behaviors. The notion that these instinctual behaviors are more likely to occur in the presence of human caretakers also raises interesting theoretical questions about the function of these behaviors during the development of the nonhuman. I think it is not far-fetched to argue that human attention may serve as a reinforcer for positive social interactions between captive animals. In captivity, nonhumans depend almost entirely on their human caretakers for food, shelter, reproductive access and other survival needs. It would make sense that a nonhuman who is more successful in capturing the attention of their caretaker, is more successful in obtaining those needs; in other words, for a wolfdog to recognize that he or she is a member of the human world is an adaptive trait for that wolfdog in the Darwinian sense that exhibiting that trait or ability would enhance the wolfdog’s quality of life.

Collateral effects of human interaction.

But human interaction can have negative side effects as well - even if it is highly preferred for an individual. In one case, we observed a low-content wolfdog, Ava, exhibiting destructive cage-chewing and cage-pulling behavior only in conditions immediately following human interaction sessions. This is an important observation for showing up why it is important to evaluate the effects of enrichment on behavior; not only what the animal is doing when the enrichment is present, but also to assess potential frustration effects on behavior when the enrichment is removed. This is also a good example of why it is important to examine the human-animal relationship with respect to the animal, and not only the human, as well as with respect to the individual animal rather than averaging data across individuals in attempts to procure “cleaner” results¹⁶.

Conclusions

To conclude, the results of this study indicate that non-anthropocentric analysis of human-animal relationships is a worthy area of investigation for behavioral scientists. Whether we are interested in the human or the nonhuman, no one can deny that a relationship exists. The wolfdog is an ideal specimen for an analysis of this relationship. Understanding the nature of interactions between wolfdogs and their human caretakers is not only useful from an applied or pragmatic perspective, and not only in the sanctuary, but also for informing about the ways in which we view such nonhumans in our world. All studies have their limitations, and one constraint on our study is that we examined only a part of the population of sanctuary wolfdogs that were socialized; and excluded those that come to the sanctuary and remained fearful of humans long after their arrival, as a result of abuse, neglect, or improper socialization. Future studies will make these individuals a priority in further understanding the relationship between wolfdogs and their caretakers from a scientific perspective. I think it is not insignificant to note that as a researcher who has a commitment to objectivity, I found myself forming a bond to these animals as well, and trying to determine how they influenced my world, and how I influenced theirs.

Acknowledgments

I would like to thank the Florida Lupine Association for their financial and professional support to allow me to attend this meeting. I am also grateful to Big Oak Wolf Sanctuary (co-founders John and Debra Knight), Full Moon Farm (Nancy Brown and volunteers Dean Rhoades and Ryan Talbot), Nite Howls Sanctuary (Mayo and Karyl Wetterberg), and Shy Wolf Sanctuary Education and Experience Center (Nancy Smith and Deanna Deppen) for their assistance with data collection and research hospitality.

References

- ¹ Skinner, B.F. 1953. *Science and Human Behavior*. The Free Press: New York.
- ² Tuan, Y. 1977. *Space and Place: The Perspective of Experience*. University of Minnesota Press: Minneapolis.
- ³ Reade, L.S., Waran, N.K. 1996. The modern zoo: how to people perceive zoo animals. *Applied Animal Behaviour Science* 47(1): 109-118.
- ⁴ Global Federation of Animal Sanctuaries.
<<http://www.sanctuaryfederation.org/gfas/about-gfas/>> Accessed on September 29, 2012.
- ⁵ Acampora, R. Zoos and eyes: contesting captivity and seeking successor practices. In: *The Animal Ethics Reader*. 2nd Ed. Eds. Susan J. Armstrong and Richard G. Botzler.
- ⁶ Swaisgood, R.R., Shepherdson, D.J. 2005. Scientific approaches to enrichment and stereotypies in zoo animals: what's been done and where should we go next? *Zoo Biology* 24(6): 499-518.
- ⁷⁻⁸ Shepherdson, D.J. 1998; In: D.J. Shepherdson, J. D.. Mellen, & M. Hutchins (eds.), 1998. *Second nature: Environmental enrichment for captive animals*. Smithsonian Institution Press, Washington, DC.
- ⁹⁻¹¹ Fine, A. 2010. *Handbook on Animal-Assisted Therapy: Theoretical Foundations and Guidelines for Practice*. Academic Press.
- ¹² USDA. Final Rules: Animal Welfare; 9 CFR Parts 1 and 2. Animal Welfare Information Center. Federal Register, Vol. 54, No. 168, August 31, 1989, p. 36112-36163.
- ¹³ Willems, R.A. 1994/1995. The Wolf-Dog Hybrid: An Overview of a Controversial Animal. Animal Welfare Information Center Newsletter (5):4.
- ¹⁴ Gloyd, J.S. 1992. AVMA. Wolf hybrids – a biological time bomb? *Journal of the American Veterinary Medical Association* 201(3): 381-2.
- ¹⁵ The manuscript for this study is currently under review at the *Journal of Applied Animal Welfare Science*.
- ¹⁶ Sidman, M. 1988. *Tactics of Scientific Research: Evaluating Experimental Data in Psychology*. Cambridge Center for Behavioral Studies.