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The Welfare of Assistance and Therapy Animals: An Ethical Comment

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I. INTRODUCTION

Ethical questions about the use of animals as therapeutic aides or for assisting persons with disabilities arise out of a tension between interests. Throughout history, people have used animals—whether for food, fiber, sport, adornment, labor, or companionship—as a means of satisfying human interests. But animals also have interests—in avoiding pain, fear, distress, or physical harm, and in pursuing their own needs, desires, and goals through the performance of species-typical patterns of behavior. Relations between people and animals only become morally problematical where there is a conflict of interests between the two: where the human use either causes pain, fear, or harm to an animal, or it in some way thwarts or prevents the animal from satisfying its own needs and goals.

During the last 10 years, purveyors and proponents of animal-assisted activities and therapy (AAA/T) such as the Delta Society have made concerted efforts to professionalize the “industry,” and establish selection and training standards that aim to minimize the risks of harm to all concerned, including the animals (Hines & Fredrickson, 1998). However, AAA/T has experienced

explosive growth within the last decade, and in many cases these standards have been set in the absence of any systematic or empirical evaluation of the potential risks to animals imposed by current practices. Indeed, there is a general but unsubstantiated feeling across the industry that these are "good" activities for animals to be engaged in. The fact that a large number of animals fail to respond to the nurturing and training they receive has not generally been taken as evidence that they do not want to, or are unable to, participate. Instead, practitioners tend to respond to failure by changing the selection or the training procedures, as if the animals are theoretically capable of responding positively to any demands made of them.

Much of the rest of this handbook has been devoted to demonstrating how the use of therapy and service (assistance) animals significantly enhances human health and well-being. The question we address in this chapter is whether this end morally justifies the means of achieving it. Specifically, our goal is to reexamine the animal-human partnership from the animal's viewpoint to see what the benefits might be for the animal, or to see if the raising, training, and deployment of assistance and therapy animals is causing significant degradation in their welfare.¹ In doing so, however, we recognize that there is a shortage of reliable scientific evidence to reinforce some of our claims. Additionally, the authors want to make an impression for clinicians to examine their ethical responsibility for the welfare of their therapeutic adjuncts. Clinicians must respect the integrity of the animals and recognize that their involvement must be carefully monitored, so that their rights and safety are safeguarded.

The information that follows pertains more to the authors' concerns about the rearing, training and expected responsibilities of service animals. As was explained in Chapter 13, the term *service animal* is defined in the U.S. civil rights law (Americans with Disabilities Act of 1990), as "any animal individually trained to do work or perform tasks for the benefit of a person with a disability." However, some of the issues covered in this discussion have direct relevance to animals incorporated in AAA/T. When appropriate, the authors will also highlight their specific concerns for clinicians' considerations.

¹ The concept of welfare or "poor" welfare has been variously defined by animal welfare scientists. Some definitions stress the presence of unpleasant mental or emotional states such as pain, fear, frustration or suffering (Dawkins, 1980); some place the emphasis on impairments to an animal's biological fitness (McGlone, 1993; Broom & Johnson, 1993), while others refer to the extent to which environmental stresses and strains exceed the animal's ability to cope or adapt (Fraser & Broom, 1990). Rather than lend support to any one of these competing definitions, we will consider welfare as comprising elements of all of them.

II. POSSIBLE SOURCES OF ANIMAL WELFARE PROBLEMS WITH SERVICE ANIMALS AND THOSE INCORPORATED IN AAA/T

A. FAILURE TO PROVIDE FOR ANIMALS' BEHAVIORAL AND SOCIAL NEEDS

In addition to having physical requirements for food, water, protection from the elements, etc., most animals have social and behavioral needs that should be provided for whenever possible (Dawkins, 1988). An understanding of these social and behavioral needs by primary caregivers is part of the ethical obligation attending animal ownership and use. Different species tend to have different social and behavioral needs (Mason & Mendl, 1993). Judging the value of a particular behavior or social interaction to an animal may sometimes be difficult. However, in general, if an animal is strongly internally motivated to perform a particular behavior or social interaction, and if its motivation to perform appears to increase following a period of deprivation, it is an indication that the activity or interaction is probably important to the maintenance of that animal's welfare. Common indications of deprivation include animals performing abnormally high frequencies of displacement activities, stereotypies, or self-mutilation (Broom & Johnson, 1993).

All animals need to be safe from any abuse and danger from any client at all times. The animal must be able to find a safe refuge within the working environment to go to if he or she feels exhausted or stressed. Throughout the day, the animal utilized in AAA/T needs to have a break from actual patient contact. Therapy and service animals must be free from pain, injury, or disease. All animals should be kept up to date on their inoculations. If the animal seems ill, stressed, or exhausted, medical attention must be given.

For assistance and therapy animals, welfare problems are most likely to arise in circumstances where animals are either residential within health care settings or spend large amounts of time in holding facilities such as kennels or stables. In the former context, inadequate advance planning, selection, and staff commitment and oversight can lead to animals being improperly cared for (Hines & Fredrickson, 1998). Small mammals, birds, and reptiles that are caged or confined are probably at greater risk of neglect or improper care, and nondomestic species that tend to have more specialized requirements than domestic ones are also likely to be at risk. "Improperly cared for" in these contexts should have the broadest definition. Most often it is defined as animals that are inadequately fed, watered, or cleaned. However, any failure to attend to individual needs should be regarded as improper care. Overfeeding animals to the point of obesity is just as negligent as underfeeding. Giving an animal

the opportunity to exercise is not enough without ensuring that the individual takes advantage of the opportunity.

With regard to AAA/T, an additional challenge may arise when an animal begins to age. Naturally, the animal's schedule for therapeutic involvement will have to be curtailed. This may cause some disruption and adjustment to both the clinician as well as the animal.

To assist in organizing some of our thoughts pertaining to the psychosocial concerns and needs of therapy animals, the Appendix has been formulated to identify specific guidelines for consideration. These guidelines are pertinent to both services provided in large-scale institutionally based programs as well as small clinical practices.

Welfare problems may be particularly severe where animals, such as dogs, have been reared in the enriched environment of a human foster home and then kenneled individually for months as part of their final training (Hubrecht, 1995). Such an abrupt change in social and physical environment appears to be highly stressful for some animals (Coppinger & Zuccotti, in press) and may not only affect their immediate welfare, but also has the potential to foster obnoxious behaviors that might preclude successful training and placement.

Assistance animals may also be at risk because of the changing nature of their relationships with successive human owners and handlers throughout their lives. Most of these animals are picked because they are innately social—that is, they are internally motivated to seek social interactions with others—and because they form strong bonds of attachment for their human partners. Having to endure a whole succession of different handlers with different characteristics, experience, and motivations for “ownership” is likely to be particularly stressful for these individuals. Conversely, and in contrast to free-living animals, most therapy and assistance animals are trapped in systems where they have little control over their social lives, and where they cannot avoid or escape unwelcome or unpleasant social intrusions. Denying animals control over their physical and social environment can have adverse effects on their physical and mental well-being (Hubrecht *et al.*, 1992).

Unfortunately, AAA/T program planners and practitioners sometimes have little firsthand knowledge of animal needs other than hygienic or veterinary considerations, and with many agencies there is confusion as to who is responsible for the animals' social requirements. Veterinarians who attend to the health and immunization of puppies, attendants who clean, feed, and water, trainers who condition the behavior for 1 hour a day, fund raisers, directors, or whomever—none is assigned specific responsibility for the animal's social well-being.

B. SELECTING OR BREEDING ANIMALS FOR ASSISTANCE

Most domestic animals have been selected to show a higher degree of tolerance of stressful situations and stimuli compared with nondomestic species, even those reared entirely in captivity (Hemmer, 1990). Nondomestic species are also harder to train, and their entrained responses extinguish more quickly in the absence of appropriate reinforcement. Some species, such as many nonhuman primates, are also highly intelligent and socially manipulative (Cheney & Seyfarth, 1990), and this tends to make them potentially unreliable or unsafe as social companions for people. All of these factors make nondomestic species less suitable for use in AAA/T programs, and more likely to experience welfare problems if used.

This point is well illustrated by recent efforts to train and use capuchin monkeys to assist people with serious disabilities. In most cases, these programs have found it necessary to neuter and surgically extract the canine teeth from the monkeys before they can be used safely with such vulnerable human partners. Monkeys may also be required to wear remotely controlled, electric shock-collars or harnesses in order to provide the user with a means of controlling the animal's potentially aggressive and unreliable behavior. Clearly, the necessity of using of such extreme and invasive measures raises doubts about the practical value of such programs, as well as serious ethical questions concerning the welfare of the animals involved.

It is probably fair to say that all animals adopted for AAA/T service have their behavior modified or curtailed to some degree. At the very least they need to be tamed and taught certain non-natural skills through formal education. This is a different process from that used to train most sporting or working dogs where the performance of the desired behavior generally provides its own reward (Coppinger *et al.*, 1998, and see later discussion).

Not all domestic animal species are practical for becoming service animals. Without belaboring the point it would be difficult to conceive of a guiding cat or a hearing ear donkey. In practice, dogs may be the only domestic species that can be reliably trained to perform a wide variety of household tasks for a person with disabilities, but within the dog population as a whole there is considerable individual variation in the suitability of dogs for this type of work.

Some service dogs, such as the hearing ear dogs, are almost exclusively obtained from shelters. Indeed, some of the motivation for training these and other therapy dogs is to rescue some of these otherwise forsaken animals. For example, a large number of greyhounds are used in therapy work, not because they are necessarily the best breed for the work, but because large numbers

are culled from racing and would otherwise be euthanized. The recycling of animals relinquished to shelters clearly has a beneficial welfare impact, although some AAA/T practitioners doubt the reliability of these reconditioned pets. Much of the reluctance to use these animals is based on the fear that latent, unacceptable behavior will emerge and cause injury to the person using the animal.

Currently, about half the assistance animal agencies rely on shelter dogs, although identifying suitable dogs among the 4 to 5 million relinquished each year is a major problem. Hearing ear and therapy dogs are perhaps the easiest to locate since there are no size restrictions. One problem for everyone in this system, however, is to identify the animal before the abandonment and confinement process has a permanent damaging effect on its personality. Agencies using these dogs often have a prescribed test that the dog is required to pass in order to be accepted into a program. However, agency personnel vary widely in their ability to interpret test results, and even experienced selectors have no idea if the test is effective in maximizing acceptance of qualified animals, simply because the controlled experiments have never been done. Given the industry's need for qualified dogs, and the ethical benefits of using shelter animals, there is considerable room for improvement in the identification and distribution of serviceable animals from shelters.

In-house breeding programs are favored by guide dog and wheelchair dog organizations. Both kinds of agencies will also purchase dogs and accept donated dogs. The primary reason for producing and buying dogs is to obtain animals of relatively uniform size. It is not that other breeds are not temperamentally suited, but the task to be performed requires a dog with particular physical characteristics. Within the industry, most of the emphasis is on just three breeds: Labrador retrievers, German shepherds, and golden retrievers. Recently, more interest has also been shown in using cross-bred retrievers.

The history of dog breeding until modern times has been to create superior working animals through hybridization. Although there was some breed maintenance from ancient times, the vast majority of our modern sporting and working dogs were the result of random matings accomplished by the animals themselves accompanied by postzygotic culling of unwanted animals. Just prior to the beginning of this century, breeds were created by hybridizing strains in order to achieve working excellence. In the 19th century, a shift toward prezygotic selection began that has intensified ever since. The assumption behind this process is that excellence of form and behavior can be purified and preserved within a breed. Although such breeding practices do tend to produce uniformity of appearance and behavior within breeds, in the absence of periodic outcrossing, they also promote inbreeding depression, and the expression of various recessively inherited "genetic" diseases.

Unfortunately, the assistance dog industry has been slow to recognize these dangers. Agency breeding programs selectively breed "out" undesirable characters such as hip dysplasia, retinal atrophy, fearfulness, and aggression, but they are not breeding "in" desirable characteristics. As a matter of fact, it is impossible to breed "in" to a closed gene pool, which is what a breed is. Each time individuals are removed from the population, because they don't have the minimum quality hips, say, all of their other genes are removed from the population. The next individual is not bred because it is too fearful, and all of its genes are removed, even the ones for good hips. Each generation gets more inbred because of the shrinking genetic variation, creating highly homozygous strains. In theory, dogs generated in these systems are more vulnerable to infectious disease, as well as being more likely to show phenotypic expression of deleterious mutant alleles.

In some agencies considerable attention is paid to inbreeding depression but it is mostly in terms of how to slow the rate, rather than discussions of how to prevent it. There has been some suggestion that sharing breeding stock between agencies could revitalize inbred stock. Progress made at one agency at eliminating genetic defects could then be helpful to other breeders. So far, however, the tendency is for each of the agencies to solve the problems on their own with small populations of dogs.

There is another ethical issue buried within this production system. Creating large numbers of animals year after year with hip dysplasia or retinal atrophy is ethically questionable in itself, but ethical questions also attend the disposal of animals diagnosed with disease and dropped from assistance programs. Should these animals be euthanized or should they be put up for adoption? Overall, these kinds of issues raise certain doubts about the wisdom of maintaining purebred strains of dogs for assistance work.

C. FAILURE TO TAKE ACCOUNT OF DEVELOPMENTAL EVENTS AND PROCESSES

There is confusion among many assistance animal programs concerning the difference between genetic, environmental, and developmental effects. For example, one can find statements in the literature declaring that there are no environmental factors that cause CHD (canine hip dysplasia) (Orthopedic Foundation for Animals, 1998). Such statements are incorrect. The embryologic definition of development is the interaction between a gene and its environment (Serpell, 1987). Therefore, a dog with the condition known as hip dysplasia is the product of an inherited (genetic) predisposition interacting with the environment at various stages in its development. The environment

is as much a "cause" of the condition as are the genes. Precisely the same is true of behavior.

It is well established from research on canid development that early experiences have more profound and longer lasting effects on behavior than those occurring at later stages of the life cycle (Serpell & Jagoe, 1995). It is not difficult to understand why. When a German shepherd puppy is born, it has a brain volume of about 8 cm³, and at this stage it has all the brain cells it is ever going to have. By 8 weeks its brain has grown to 80 cm³, and at 16 weeks the brain is approaching its adult size of 120 cm³. If the brain increases 15 times in volume during this short period, but maintains the same cell number, where is the growth occurring? The answer is that the increase in size is almost all due to the development of connections between the cells. Most of the cells are arranged in a matrix of connections during the first 16 weeks. The matrix is constructed in response to electrical stimulation and activity patterns. How the animal moves, what it perceives with its senses, and the kinds of stresses it endures all determine the pattern of electrical charges that stimulate the growth of the connective matrix. Human children growing up in orphanages have not only smaller brains (not as many connections) than "normal" children but they don't show the same electrical patterning, even though they presumably have the same number of brain cells. This is what is meant by a developmental effect—a synergism between genes and the environment. It does not mean that there are no genetic effects. It means that genetic and environmental effects cannot be separated.

Now consider where most service puppies spend the first 8 weeks of their lives: in a sterilized kennel being protected from any environmental insult that might challenge their little immune systems. The kennel is the equivalent of an orphanage. Kennel workers are very good at keeping puppies sanitized, and will respond positively if you ask if they have heard of the critical period for socialization. But it would be fair to say that few understand what it means in terms of brain development. Why is it that up to 50% of agency-bred dogs are unable to perform the tasks assigned to them? Is it because of genetic flaws, or is it because of the developmental effects of spending the first 8 weeks in an impoverished environment? If the latter, then the "industry" is predisposing puppies to be ill equipped to cope with the demands made on them later in life.

These dogs are growing up on a fabricated diet, in a contrived and impoverished environment in which the handlers' motivations are primarily to do with health care and cost effectiveness. As a system, it pays practically no attention to neurologic and cognitive development. And yet the behavioral result of what happens to a pup during this period is largely permanent. Once the brain connections are made, there is no changing them. How and what a pup can learn is virtually fixed by 1 year of age. Instructors with experience can look

at a 1-year-old dog and make a pretty accurate assessment of whether it can learn to be an assistance dog or not. Depending on how the dog was "wired" in those early sensitive periods predetermines how it will behave as an adult. Indeed, the reason why puppy testing does not work as a predictive tool is that the brains of puppies less than 16 weeks of age are incompletely wired, and how they get wired varies greatly depending on the environment to which the pups are adapting.

Agencies and programs raising animals for service or for use in AAA/T have a moral duty to ensure that the animals they produce are correctly prepared for their adult roles. At every stage of growth and development, dogs could and should be shaped and molded to perform their adult tasks. If particular tasks are required of the assistance adult—that is turning on a light—then the dog's developmental exposure should prepare it for such a task. Food boxes could require similar tasks in such a way that the dog achieves a cognitive awareness of what is being performed. How dogs handle novel situations is another major cause of rejection. A fearful dog cannot be trained to deal with novelty. For example, sidewalk grates common in cities may be an insurmountable problem for a dog. Again the types of problems that cause a high failure rate might be eliminated by paying attention to the early (4 to 16-week) developmental environment. If done properly, a dog might even learn to enjoy performing its work simply because it has developed the cognitive ability to transcend operant conditioning and understand what it is doing and why. On the other hand, the "industry" may also have to face the morally uncomfortable possibility that the only way to raise a "good" assistance dog is to raise it in a deprived environment. It may be that the most successful dogs are products of particular kinds of environmental impoverishment; that the more cognitively developed animals are actually ill suited to perform this kind of repetitive and tedious daily work.

D. USING INAPPROPRIATE OR INHUMANE TRAINING METHODS

The underlying assumption of operant conditioning is that any animal can learn any performance by external reward or external punishment. For example, a moving animal is rewarded for going in the correct direction and punished for going in the wrong direction. There is a lengthy and complex literature on when, how much, and how often the animal should be rewarded or punished, and about what is actually reinforced. This is essentially the method used to train many service animals.

But two important keys are often missing from this learning paradigm. First, the reason dogs have been so successful as companions is that they are prepared

to work for the reward of social interaction with people. Second, because particular dog breeds innately "like" to search for game, or like to herd sheep, it is not essential to reward such performance. Working dog specialists generally consider it impossible to train an animal that does not show the internal motivation to perform the specific task. Most sporting or traditional working dogs, such as sheep dogs or sled dogs, are not aversively conditioned nor are they given food rewards for proper performance. In fact the problem for trainers is to stop the performance short of exhausting the animal (Coppinger & Schneider, 1995). As a generalization, most traditional working dog trainers do not use aversive conditioning as the primary training strategy. Nor do they need to. Dogs tend to "sour" with aversive conditioning, and because many performances depend on stamina and willingness to work, dog trainers avoid associating performance with any form of punishment. On a sled dog team, severe punishment might be used to stop a dog fight, but no driver would attempt to persuade a dog to run by punishing it.

In contrast, aversive conditioning is the primary method of instruction for many assistance dogs. It may be the only method that is practical because many assistance dog tasks are not discrete, nor is the significance of the task understood by the dog. "Find the bird" is a discrete task, regardless of how long it takes. It has a beginning and an end of which the dog is aware. Even the running sled dog is socially facilitated to run because other dogs are running. Pulling the sled is a by-product, secondary to the performance of running with other dogs.

Pulling a wheel chair is fundamentally different from these tasks because there is no intrinsic reward, nor is it socially facilitated in the manner of a sled dog performing with other dogs. Tasks like these are difficult to reward because performance is an ongoing event. You cannot reward the cessation of activity at the end of the pull, and punishment is equally inappropriate (Coppinger *et al.*, 1998).

The attitude of many assistance dogs in public seems to reflect the aversive training techniques, and the internal confusion as to what is expected (Coppinger, personal observations). This is probably more true of wheelchair than guide dogs. The high failure rate in AAA/T animals may in part be due to inappropriate training procedures. There has recently been some interest in "click and treat" methods using a variation of Pavlovian conditioning. This is a useful approach for "civilizing" assistance dogs and works reasonably well on hearing ear and therapy dogs. As yet it has not been demonstrated to work as a viable system for wheelchair or guide dogs. It may be that there is in fact no appropriate or humane training technique for dogs of this type, which might lead one to the ethical conclusion that animals shouldn't be asked to perform such tasks.

At present, it is unclear once a dog graduates from an agency how long it continues to perform satisfactorily. Clearly, with guide dogs, mistakes are immediately noticeable, and incorrect performance can be continually corrected. However hearing ear dogs could cease performing without the client noticing in time to correct the problem. There is a lack of data for any of the assistance dogs on either the competency of performance, the duration of performance, or the value of the performance to the end-user. Allen and Blascovich (1996) have demonstrated that there is value in owning a trained dog, but they give no evidence that the dog's performance of particular tasks is in any way a contributory factor.

E. UNREALISTIC EXPECTATIONS

Therapy animals are not usually required to perform complex or physically demanding tasks for their users, although the possibility of excessive social stimulation certainly exists. Service animals, in contrast, are expected to obey complex commands and perform relatively challenging physical activities that create a potential for welfare problems. In their recent study, Coppinger *et al.* (1998) have been critical of the unrealistic expectations that some service dog programs have of their protégés. They argue that superficially simple activities, such as pulling a wheelchair or opening a swing door, may impose excessive physical strains on a dog that could result in physical injury over time. Furthermore, since the tasks themselves are potentially aversive, and because the dogs have not been specifically selected for performing these tasks the way most traditional working dogs have, they lack any internal motivation to perform, and may, as a consequence, have difficulty meeting the goals of conventional reward-based training or of retaining responses once they have been entrained (Coppinger *et al.*, 1998).

F. USE OF BADLY DESIGNED EQUIPMENT AND FACILITIES

By analyzing the "physics" of some of the tasks that service dogs are asked to perform, Coppinger *et al.* (1998) have recently drawn attention to inherent design flaws in some of the equipment used by persons with disabilities that may result in discomfort or injury to the dogs. Harnesses, for example, suggested that the designers did not understand the basic principles of harness design. Some had pulling webs crossed moving parts, thus chafing the dog badly as it moved. Trying to get a dog to pull a wheelchair that is designed to be pushed forces the dog into awkward positions, increasing the difficulty

of the task. Some of the tasks, such as pulling a wheelchair or pulling open a door with the teeth, reach the limits of what a dog is physically able to perform.

Various studies have also been critical of conventional kennel-housing for dogs, most of which has been designed to reduce labor costs and facilitate hygiene rather than with the welfare of the animals in mind. Kennels used to house service dogs during training are often cell-like in appearance with opaque barriers separating adjacent pens. Dogs are usually housed singly or, less often, in pairs, and often there is little in the way of toys or other forms of enrichment to relieve the tedium of kennel existence. Dogs housed in these sorts of conditions for long periods display a range of abnormal, repetitive, or "stereotypic" behavior, such as circling, pacing, "wall-bouncing," and barking (Fox, 1965; Hite *et al.*, 1977; Hubrecht, 1993; Hubrecht *et al.*, 1992; Hughes *et al.*, 1989; Sales *et al.*, 1997). Noise levels from barking in some facilities may also be sufficiently loud to cause permanent damage to dogs' hearing (Sales *et al.*, 1997).

G. END-USER PROBLEMS

Although there have been no systematic studies of the problem, anecdotal observations suggest that some assistance dog users are insufficiently experienced with handling or training dogs. As a consequence, dogs may be given inappropriate or ill-timed commands, punished for failing to respond to these commands, rewarded at the wrong moments, and so on (Coppinger *et al.*, 1998). Not surprisingly, a dog may become confused and apathetic as a result of such inexpert handling, and such problems are likely to multiply with the use of less trainable and more socially manipulative species such as nonhuman primates. Some agencies provide refresher courses for their clients with disabilities, or can send a trainer to the person's home to correct special problems. However, greater continuing education efforts by agencies would certainly help to ensure improved quality of life for animals used in this way.

The issue of continuing education is also a significant concern for clinicians who are applying AAA/T in their own practices. As stated in earlier chapters, although clinicians may be very cognizant of treatment goals with their clients, they may be in need of further training on how to incorporate animals into their practice (therapeutically and safely). Hines and Frederickson (1998) point out that without training in the methods that animal contacts impact various consumers, therapists may incorporate inappropriate animals and procedures that will not maximize treatment outcomes. The Pet Partners program developed by the Delta Society includes in-service training in a variety of areas, including an awareness of health and skill aptitude of the animals as well as strategies to incorporate the animals with the clients. The Pet Partner program should be considered as a valuable introduction course.

Furthermore, Turner, in Chapter 19, discusses his perceptions of the value of continued education. He suggests that educational programs should be interdisciplinary in nature, and must combine sound theory along with good practical training. Some topics he suggested include training in the area of ethology and human-animal interactions, the psychosocial benefits of animals as support systems, and risk management concerns.

Clinicians will be able to find continuing education opportunities at conferences and workshops sponsored by organizations such as the International Association of Human-Animal Interaction Organizations and the Delta Society. Furthermore, opportunities may also be located at conferences and workshops sponsored by local and regional humane societies, as well as many other professional organizations interested in the therapeutic utility of the human-animal bond.

III. CONCLUSIONS AND RECOMMENDATIONS

The concept of using trained and socialized animals to assist people with disabilities, or as therapeutic adjuncts, has great intrinsic appeal, exemplifying as it does for many people the ultimate in mutually beneficial animal-human partnerships. Nevertheless, while the advantages to the humans in these relationships may be obvious, the benefits to the animals are by no means always self-evident. Indeed, the use of animals for animal-assisted activities and therapy imposes a unique set of stresses and strains on them that the "industry" is only just beginning to acknowledge.

In this commentary we have tried to identify a number of potential sources or causes of animal welfare problems in AAA/T work. In doing so, it is not our intention to criticize particular programs or practitioners. Rather our goal is to focus attention on specific practices that may give rise to ethical concerns, and which ought therefore be subjected to further scrutiny and study. Nonetheless, although much of what can be said at this stage is necessarily speculative, we consider the following preliminary recommendations appropriate:

1. Those involved in preparing animals for service and therapy need to educate themselves regarding the particular social and behavioral needs of assistance and therapy animals, both to avoid the consequences of social and behavioral deprivation, as well as to permit animals a degree of control over the levels of social and environmental stimulation they receive.
2. During the process of rearing and training assistance animals, transitions between successive handlers or owners should be carried out in such a way as to cause minimal distress due to the disruption of preexisting social bonds.
3. Nondomestic species should not be used for AAA/T work except under exceptional circumstances (e.g., wildlife rehabilitation) and where appropriate care can be guaranteed.

4. Efforts and resources should be dedicated to developing methods of accurately identifying and distributing suitable assistance animals from among those relinquished to animal shelters. These efforts should include research into appropriate behavioral screening methods.

5. The present level of assistance dog "failure" is ethically unacceptable and needs to be reduced. The "industry" should be more aware of the problems inherent in the use of closed, purebred populations of service and assistance dogs. The potential benefits of outcrossing to other populations, and of cross-breeding should be explored to reduce the prevalence of deleterious genetic diseases and to improve infectious disease resistance.

6. The industry should pay more attention to ensuring that assistance and service animals are adequately prepared during development for the tasks and roles assigned to them as adults.

7. Alternatives to the use of aversive conditioning in the training of AAA/T animals need to be investigated and developed wherever possible, particularly with respect to the training of wheelchair dogs. If necessary, the industry should consider discontinuing the use of animals for particular purposes, if alternatives to aversive conditioning cannot be found.

8. More attention should be given to the design and construction of animal-friendly equipment and holding facilities for AAA/T animals.

9. Continuing education programs for animal end-users should be available to ensure that animals are correctly handled and cared for while in field service.

APPENDIX: ETHICAL GUIDELINES FOR THE CARE AND SUPERVISION OF ANIMALS WHILE UTILIZED IN AAT OR AAA

Goal: Incorporating animals therapeutically to assist human clients.

Issue: How to balance the needs of human clients with respect for the needs of the animal.

BASIC ETHICS PRINCIPLES FOR USE OF THE THERAPY ANIMAL

1. All animals utilized therapeutically must be kept free from abuse, discomfort, and distress, both physical and mental.
2. Proper health care for the animal must be provided at all times.
3. All animals should be capable of having a quiet place where they can have time away from their work activities. Clinicians must practice preventive health procedures for all animals.

4. Interactions with clients must be structured so as to maintain the animal's capacity to serve as a useful therapeutic agent.
5. A situation of abuse or stress for a therapy animal should never be allowed except in such cases where temporarily permitting such abuse is necessary to avoid a serious injury to or abuse of the human client.

PROCEDURES FOR ETHICAL DECISION MAKING REGARDING THERAPY ANIMALS

1. Identify the human needs:
 - What does the client need from the therapy animal?
 - How much time does the client need to spend with the animal?
 - What is the nature of the contact/time spent with the animal?
2. Identify the animal's most basic needs:
 - Proper care
 - Affection
 - Quiet time
3. Compare the human and animal needs:
 - Only the most compelling of human need (e.g., avoiding serious mental or physical injury) should ever be allowed to take priority over the basic needs of the animal.

IMPLICATIONS OF PROCEDURE FOR ETHICAL DECISION MAKING REGARDING THERAPY ANIMALS

1. If the intervention is unduly stressing the animal, the clinician should suspend the session or the interaction.
2. Therapists using therapy animals must provide "downtime" for the animal several times a day.
3. Older animals and those faced with large amounts of stress should have their service scaled back or eliminated entirely. Attention should also be given to transition the animal as retirement begins. This will help with the animals' sense of wellness.
4. In a situation where a client, whether intentionally or unintentionally, subjects a therapy animal to abuse, the basic needs of the animal must be respected, even if this means terminating the animal's relationship with the client. In a case where a therapist suspects that a client may be likely to abuse the animal, a therapist must take precautions to protect the animal's welfare and rights. When any evidence of stress

or abuse becomes evident, the therapist must terminate the animal's relationship with the client.

5. Clients who severely abuse a therapy animal may thereby destroy the animal's capacity to help others. Clients in this situation thus violate Principle 4.

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