

Overpopulation or Too Many Unwanted Pets? Perspective on Concepts and Management Approaches

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Introduction

There is public concern that overpopulation of dogs in the US results in high rates of euthanasia, yet debate exists as to whether an overpopulation problem exists. Pet overpopulation can be defined as a surplus when compared to demand for ownership by people (Fennell, 1999). The term “overpopulation” in reference to dogs and cats was first used in the US in humane association newsletters in the 1940s, following population movement from rural areas to cities and suburbs (Moulton *et al.*, 1991). Societal shifts in the role of dogs in the household — from working animals to companions — and improvements in companion animal medicine and nutrition led to increases in companion animal reproduction as well as longevity. Consequently, the pet population became an active topic of discussion, study, and policy in the 1970s (Clancy & Rowan, 2003). Today, management of the pet population is of even greater concern. Significant financial and emotional resources are invested. The objective of this paper is to summarize the history of the concept of pet overpopulation, evaluate the approaches used to manage the pet dog population, and provide a basis for examining the concerns that have emerged due to widespread acceptance of the idea of pet overpopulation.

Pet overpopulation or unwanted pets?

The framing of the unwanted pet problem as an *overpopulation* problem in the US became evident by the



early 1970s. In 1973, an estimated 13 million animals entered shelters (HSUS, 2016). Not surprisingly, this led to perceptions of a correlation between high pet production numbers and high euthanasia rates. A study focusing on the dynamics of the dog and cat populations in two California counties

characterized the problem of millions of dogs in shelters as a problem of puppy retention, noting that 35% of puppies that had been adopted into homes were no longer there at 1 year of age (Schneider, 1975). Three factors associated with relinquishment of dogs to shelters were identified: oversupply of dogs, lack of desire for or satisfaction with an owned pet (which would now be characterized as a broken human-animal bond), and a lack of responsibility by owners, particularly in terms of controlling breeding behaviors (Schneider, 1975). The first and third factors resulted in a push for reproductive control of companion animals through mandatory spay-neuter legislation (Schneider, 1975), an approach that is still promoted by many shelter managers and veterinarians.

The 1990s saw the formation of organizations such as the National Council on Pet Population Study and Policy (Zawistowski *et al.*, 1998) and an increased focus on improving information collected from shelters. A study on pet relinquishment to animal shelters conducted between 1995 and 1996 at 12 animal shelters in four regions of the US indicated that only 9% of dogs taken



in at these shelters were less than 5 months old; almost half were between 5 months and 3 years of age, and about 37% were older than 3 years. More intact dogs were relinquished than spayed or neutered dogs (54.7% as compared to 42.8%) (Salman et al., 1998). In contrast, a separate study focusing on a region served by a single shelter found the risk of relinquishment to be greatest for dogs less than 6 months of age (Patronek et al., 1996). However, dogs that were brought into the household at 1 to 2 years of age were at greater risk of relinquishment than those brought in as puppies (Patronek et al., 1996). These numbers suggest that at the time these studies were performed, the number of dogs in shelters reflected weak or unhealthy human-animal bonds that favored pet relinquishment over retention, not overproduction of puppies. However, operating from the (noncomprehensive) premise that the solution to the problem was too many pet animals being produced, policy efforts had shifted almost entirely to controlling pet reproduction.

Has reproductive control effectively reduced euthanasia rates?

Mandatory spay-neuter laws for pet owners have been enacted by several urban centers, including Los Angeles County; Dallas, Texas; and Las Vegas, Nevada. Thirty states require sterilization or a commitment to sterilize for adoption of a shelter or rescue animal (AVMA, 2013). According to recent estimates, about half of the 6 million to 8 million companion animals that enter shelters each year are dogs (HSUS, 2016; ASPCA, 2016). Actual numbers may vary depending upon which shelters are surveyed (Clancy & Rowan, 2003). Nevertheless, because this is a significant drop from the 1970s — assuming that shelter population estimates then were accurate — control of pet reproduction has obviously contributed to reducing the shelter pet population. An examination of trends over time, though, has indicated that there was a sharp drop in the number of animals surrendered to shelters in the 1970s, stabilization in the 1980s and 1990s, and a second decrease beginning in the 2000s (Clancy & Rowan, 2003). Since the initial push toward sterilization occurred in the 1970s, the more recent decrease indicates that factors besides sterilization have contributed to the reduced numbers of unwanted dogs that become



candidates for euthanasia. It is possible that the recent change in many people's views of dogs as family members, rather than just pets, may have decreased willingness of owners to relinquish them to shelters. People have described dogs as family members and friends since at least the 1980s (Cain, 1983; Stallones *et al.*, 1988). Some may, as a result, have been re-homed to friends and family. Increased access to animal care professionals, particularly those with expertise in preventing and managing dog behavior problems that are among the most common reasons for relinquishment may have also increased retention of dogs by their owners.

Evidence that reproductive management alone does not fully address the problem of high euthanasia rates can be found in the fact that despite the push to spay and neuter dogs, an estimated 1.2 million of the dogs entering shelters are euthanized annually (ASPCA, 2016). Complicating the issue, this number is not distributed evenly across the country. It is currently unclear whether regional variation in the percentage of shelter dogs euthanized is related to variability in the income of owners, variability in the educational level of owners, other societal factors or some combination of all of these factors. Because of the likelihood that any of these elements separately or collectively could contribute to the problem of unwanted dogs, effective management of dog populations requires further investigation of regional and local factors that contribute to broken bonds between people and their dogs.

Conclusion

Management of dog populations has been a concern for decades because of the welfare implications associated with surrendering, abandoning and euthanizing large numbers of dogs. However, there has been a persistent subtext that suggests that high euthanasia rates are a direct reflection of high reproductive rates, leading to the incomplete answer of mandatory spay/neuter as a solution. While promotion of sterilization surgery has undoubtedly contributed to decreases in the numbers of companion animals entering shelters, failure to retain puppies and juvenile dogs within a household as they grow to adulthood contributes to euthanasia rates. Yet that issue has yet to be adequately discussed, much less addressed. Factors contributing to the relinquishment and euthanasia of dogs deserve attention equal to what has been given to reproductive control. Research, management and legislative efforts are needed at regional and local levels as variation in management challenges and successes occurs within as well as between communities. At the national level, the need to build and protect the human-animal bond must be addressed in order to balance the welfare of dogs with people's desire for them as companions. Development of effective methods for addressing both requires re-evaluation in the context of the United States of the 21st century.

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