My name is Dr. Frank McMillan and I submit the following as my written testimony to the Task Force Concerning the Sale of Cats and Dogs at Connecticut Pet Shops from Inhumane Origins. You will find my biography at the bottom of the page.

We have conducted several scientific studies on dogs that have lived in large-scale breeding facilities – the type that serve as the source for the overwhelming majority of puppies sold through pet stores. Please find accompanying this document an Executive Summary of our two largest studies for your easy access to the key findings and conclusions of our research. The main point I would like to convey is that the psychological trauma to both the adult dogs and the puppies from their confinement in these commercial breeding establishments is extensive, severe, and long-lasting. There is no question as to the harm inflicted on the dogs from the inadequate care they receive in these facilities. Most importantly, based on current research of the psychological needs of dogs it can be stated that no federal or state laws now in existence are sufficient to protect the dogs from psychological harm. In other words, even if these breeding establishments were to abide by the strictest laws ever placed on the books the dogs in the facilities could still be living under conditions capable of inflicting grave harm. This is because the laws haven't come close to keeping pace with the advances in scientific knowledge about the nature of canine well-being.

In addition to this dismal state of affairs, we found that the puppies being sold through pet stores, once grown to maturity, exhibit dramatically higher rates of aggression than dogs coming from noncommercial, small-scale breeders. This means that the public is placed at a significantly increased risk of human injury from dogs coming from pet stores.

What we now know about canine welfare and well-being allows us not just to recognize where the animals' quality of life is impaired, but also to construct environments that permit animals to have a decent quality of life. Accordingly, there is no reason for any animals to be forced to endure a diminished quality of life just to produce offspring that can be placed in pet store windows to attract unsuspecting buyers – buyers who know little or nothing about the quality of life of the puppy's parents or that this puppy has more than a 200% increase in likelihood of biting them when it grows up.

Franklin D. McMillan, DVM Nov 20, 2013

Franklin D. McMillan, DVM is the director of well-being studies at Best Friends Animal Society. Dr. McMillan is a board-certified specialist in veterinary internal medicine and was previously in private practice for 23 years as well as serving as clinical professor of medicine at the Western University of Health Sciences College of Veterinary Medicine. He is the author of the textbook *Mental Health and Well-Being in Animals* and has published dozens of scientific journal articles on the subjects of emotional health and suffering, stress, and quality of life in animals. Dr. McMillan's research concerns animal quality of life and the mental health and emotional wellbeing of animals who have experienced psychological trauma from abuse and neglect in all its forms.

Scientific studies of the dogs and puppies from commercial dog breeding establishments ('puppy mills')

Executive Summary

Background

Commercial breeding establishments, or puppy mills, are large scale facilities where dogs are confined in small enclosures for their entire reproductive lives with little to no exercise or positive human contact—for the sole purpose of mass-producing puppies to sell for profit through retail pet stores and via the Internet.

Synopsis

In two large-scale studies of dogs from high volume commercial breeding establishments – the adult breeding dogs as well as the puppies sold through pet stores – the evidence showed conclusively that these breeding facilities are highly injurious to both groups of dogs, resulting in severe, extensive, and long-term harm to the behavioral and psychological well-being of the dogs.

Study 1: The adult breeding dogs

What the study looked at

This study compared a wide array of psychological and behavioral characteristics of 1,169 dogs formerly kept for breeding purposes in commercial breeding establishments with pet dogs owned by members of the general public.

Researchers

Franklin D. McMillan, DVM Best Friends Animal Society Deborah L. Duffy, PhD University of Pennsylvania School of Veterinary Medicine James A. Serpell, PhD University of Pennsylvania School of Veterinary Medicine

The published paper

Mental health of dogs formerly used as 'breeding stock' in commercial breeding establishments. FD McMillan, DL Duffy, JA Serpell. Applied Animal Behaviour Science 2011; 135: 86-94.

What the study found

- The results showed a broad range of abnormal behavioral and psychological characteristics in the former breeding dogs from large-scale commercial breeding establishments, including: significantly elevated levels of fears and phobias, pronounced compulsive and repetitive behaviors such as spinning in tight circles and pacing, house soiling, and a heightened sensitivity to being touched and picked up.
- The psychological harm demonstrated in these dogs is severe and long-lasting. Much of the harm is irreparable and will remain a continued source of suffering for years after the dogs leave the breeding facility, in some cases for the entire lifetime of the dog.

Conclusions

- Current laws at both the national and state levels are not based on current scientific knowledge of animal psychology, quality of life, suffering, and welfare, and are thus inadequate to protect dogs from the psychological harm resulting from living in commercial breeding establishments.
- Legislation to adequately protect the welfare of dogs in confinement needs to be updated to reflect current scientific knowledge.

Where a copy of the published study may be obtained: Dr. Frank McMillan (dr.frank@bestfriends.org)

Study 2: The puppies

What the study looked at

This study compared the psychological and behavioral characteristics of 413 adult dogs that were purchased as puppies from pet stores with adult dogs purchased as puppies from small-scale, private breeders.

Researchers

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The published paper

Differences in behavioral characteristics between dogs obtained as puppies from pet stores and those obtained from noncommercial breeders. FD McMillan, JA Serpell, DL Duffy, E Masaoud, IR Dohoo. *Journal of the American Veterinary Medical Association* 2013;242:1359-1363.

What was found

- Dogs obtained as puppies from pet stores received significantly less favorable scores than breeder-obtained dogs on most behavioral variables measured. Compared with dogs obtained as puppies from noncommercial breeders, dogs from pet stores had significantly greater aggression toward human family members, unfamiliar people, and other dogs; greater fear of other dogs and typical life events; and greater separation-related problems and house soiling.
- For no behavior evaluated in the study did pet store dogs score more favorably than noncommercial breeder dogs.
- The chances of a dog developing serious behavior problems is much higher for dogs purchased as puppies from pet stores, as compared to obtaining dogs from small, noncommercial breeders.

Conclusions

- On the basis of these findings combined with findings from earlier small-scale studies of pet store-obtained dogs, until the causes of the unfavorable differences detected in this group of dogs can be specifically identified and remedied, the authors of this study withhold any recommend that puppies be obtained from pet stores.
- Dogs sold by pet stores are misrepresented to consumers as a high-quality product, when the data now shows that consumers are not receiving what they believe they are paying for. The increased risk of behavior problems that pet store customers face as their dog matures includes aggression issues, which pose a significant risk for human injury. Consumer protective legislation is urgently needed in this area.
- Legislation to improve the conditions in the large-scale commercial breeding facilities supplying puppies to pet stores is needed to assure that the puppies are not at any increased risk of maturing into adult dogs with serious behavior problems.

Where a copy of the published study may be obtained: Dr. Frank McMillan (dr.frank@bestfriends.org)

Overall Conclusions

- Current laws provide inadequate protection against harm to breeding dogs and puppies associated with commercial breeding establishments.
- Consumers purchasing puppies from pet stores are unknowingly assuming a risk of difficult and serious behavior problems in their dogs, including dog behavior that can endanger their own safety.
- If dogs are to be bred to produce puppies for sale, all of the dogs and puppies should be assured a decent quality of life based on the most current scientific research.