

INTRODUCTION

While it may be regarded by some as inhumane or unethical to take any life, mankind, as responsible stewards of animals, is obliged to do so for many reasons: for food, health, population control, to alleviate incurable suffering, etc. Yet beyond the ironies and ethical dilemmas of the right to life versus the right to take life, lies the necessity to destroy life. This entails an enormous ethical responsibility relevant to the times, and also the moral injunction that the method of killing be humane, in other words, causing the least possible distress, physically and psychologically. This injunction implies, therefore, that there is an obligation (as a final ethical responsibility and demonstration of respect for the life that is to be terminated) to utilize the best available method of euthanasia: to induce a painless death. There are also economic and aesthetic considerations and other situational variables which make this an extremely complex issue. When "euthanasia" must be administered, if it is to be humane, there should ideally be no distress: most authorities agree that many methods are far from this ideal and, to date, at best we have only a hierarchy of more or less distressing methods to choose from.

Distress measured in the eyes of an observer, dispassionate or otherwise, has necessarily been a subjective process until quite recent times. Nevertheless, the tools for evaluating the degree of distress in animals being killed and during the intervening period the refinement method and interpretation of results has progressed. It is remarkable that there has been so little application of these tools, particularly electroencephalographs (EEG) but also electrocardiographs (EKG) and measurement of blood pressure, to determining first of all which agents or methods are inherently capable of causing painless death and which of them, by modification or insistence upon practical but essential precautions, can be safely and economically adapted to invoke a rapid and painless death. Sound clinical, e.g. corneal blink reflex (for non-dissociative anesthetics), and behavioral observations should not, however, be abandoned in the evaluation process for more "sophisticated" methods. It matters little if the dog's heart is still beating and its blood well oxygenated if it is unconscious.

It would be wrong to suppose that the subject of killing dogs and cats has not attracted much attention from scientists. The present contribution, which does not pretend by any means to have exhausted the total available sources, refers to about 70 publications or private reports from 12 countries among which the U.S.A. and Great Britain figure most frequently. While the great bulk of these references relate to work undertaken in the last three decades, it proved necessary to go as far back as the 19th century for the latest (and only?) data relating to one method that had been found capable of effectively killing without great distress up to 100 dogs a day over a period of 50 years. (See Page 24)

Many veterans are of the opinion that there is only one, possibly two, killing methods known to be capable of routinely invoking death without suffering, namely intravenous injection of certain barbituate compounds, and shooting. Of the unknown millions of dogs and cats which are killed each year throughout the world, those which benefit from euthanasia are an insignificant percentage.

The extent of the confusion internationally is amply demonstrated

by the fact that the commonest method used in each of two major English-speaking countries are mutually unacceptable. Decompression chambers used throughout the U.S.A. have not so far been demonstrated in Great Britain while the electrocution chambers widely favoured in British animal shelters have been condemned in principle by American authorities. Differences in the aesthetic appeal of the two methods and the effects of nation-wide publicity campaigns to support one method over others, may account for these differences in opinion. (The implication is that differences in attitudes may be caused by the lack of factual data. Therefore there is a need for more objective research.)

Undoubtedly, one of the most constructive attempts to evaluate killing methods for dogs and cats was the Report of the Panel on Euthanasia of the American Veterinary Medical Association (1963) subsequently up-dated by a fresh panel in 1972. Before and since these initiatives, the most concerted efforts to assess and develop euthanasia methods have been promoted by the Universities Federation for Animal Welfare (UFAW), London (1975). Valuable though these interventions have been, it is clear that the uncertainties and controversies remain unresolved.

It was the desire to reinforce and to overcome the blocks of language and geography which prompted the World Federation for Protection of Animals (WFPA), Zurich, to establish an International Working Group on Euthanasia of Dogs and Cats in 1975. The working group is loosely constituted of persons with practical expertise in killing animals and who also have access to laboratory resources for undertaking further research. This reflects the necessity of not only assessing present knowledge and experience but of pursuing those lines of endeavor which analysis suggests will be most rewarding. The objective of the Group is to make recommendations on the subject which can be accepted with some confidence by those who must decide by which method animals in their charge shall be killed. They should also choose by which methods animals in their charge shall not be killed.

Members of the Group have examined the present work and, although not necessarily agreeing with every detail or particular emphasis, each has been able to suggest modification and improvements in the first draft to the extent where he or she was willing to be identified with the principles of the analysis and the direction of recommendations for further research. Their names are given under the heading of acknowledgements.

In seeking the widest possible audience through publication of this report, the motivation has been less of wishing to instruct or enlighten and more to stimulate response from workers everywhere who have knowledge or experience of the practicalities which could usefully be contributed to the dialogue now in progress. The report, in other words, far from being an end, is merely a fresh beginning.

Further research may provide us with the "ideal" method that satisfies all criteria in all contexts or it may show us that, from the hierarchy of lesser and greater distressful methods, which one is the least distressing and also the most appropriate for a given context/situation. A compromise between humane ethics and the variables of context and available methods should not be regarded, however, as an acceptable solution. The search for a humane solution to animal euthanasia under various conditions is an ethical imperative for all those in whose care or jurisdiction rests the life and well-being of our animal kin. This has reached a critical point today because of the need to destroy on a mass scale, millions

of unwanted pets (13-15 million cats and dogs per annum in the U.S. alone). Until the causes of this population explosion can be rectified, mass destruction of pets will continue and so must the search for an optimal method of euthanasia for all concerned.

References

- American Veterinary Medical Association (1972) Report on Euthanasia. *J. Am. Vet. Med. Assoc.*, 160, 761-772.
- Universities Federation of Animal Welfare (1975) *Humane Destruction of Unwanted Animals*. UFAW, 8 Hamilton Close, Potters Bar, Herts, England.