

News & Review

Canadian Report on Humane Trapping

The Federal Provincial Committee for Humane Trapping (FPCHT), which sprang from a 1973 Canadian Federal Provincial Wildlife Conference, recently completed its report and recommendations based on research conducted from 1974-1981. The FPCHT, which coordinated a national humane trapping program, was formed in response to increasing concern over some of the methods employed in the trapping of wild furbearers. While the major impetus came from humane societies, government officials, politicians and the public also lent effort and financial support to the work of the FPCHT. Thus, the report is the result of cooperation and compromise between groups with differing interests: the trappers' and wildlife officials' concern with the prosperity of the fur industry (which makes a significant contribution to Canada's GNP), and the humane societies' promotion of the humane treatment of animals.

Initially, the FPCHT was given a five-year mandate (1974-1979) which in 1977 was extended to 1981 as the enormity and complexity of the issue became apparent. The Committee's original intent was "...to recommend to provinces, traps and trapping techniques for all furbearers which will, insofar as the state of the science or the art will allow, provide the greatest 'humaneness' in holding or killing of furbearers and to maintain throughout the program communication with governments, interested persons or groups and news media." However, additional funding in 1978 enabled the FPCHT to expand its role to include support and initiation of research. A Scientific and Technical Subcommittee, comprised of scientists, trappers and representatives of humane societies, was created to ap-

praise various traps submitted by inventors, to advise on research and to assess all technical information.

The Subcommittee received 348 trapping inventions representing the three basic trapping systems that can be applied on the land or in the water: holding devices, killing-traps and snares. The holding devices, which include footsnares, leghold traps and boxtraps, are intended to restrain the land animal but kill the aquatic animal. Killing-traps and snares kill animals either on land or under water. Those traps recommended by the FPCHT received approval because they demonstrated the capability to provide a "humane" capture or kill of an animal. The Committee's working definition of "humane capture" is "...a capture during which an animal is held with minimal overt distress, and with minimal physical damage." "Humane death" means "...a death during which an animal suffers minimal distress, which is achieved by rendering an animal unconscious and insensitive to pain as rapidly as possible..." (Out of a possible 104 choices of killing-traps that were tested by the FPCHT, the 16 approved ones had kill times ranging from near-instantaneous to three minutes.)

Other research conducted under the auspices of the FPCHT project included the study of the physiology of semi-aquatic furbearers, which comprise 50-70% of the animals trapped for their fur, and the relative humaneness of underwater holding- and killing-traps. Killing-snares were also investigated, as 30% of those animals trapped on land are caught in snares. The FPCHT also produced guidelines for the use of boxtraps and leghold devices. One of the most significant statements of the report concerns the controversial standard steel-jawed leghold trap: "...[r]esearch and field studies have demonstrated that the

standard steel-jawed leghold trap is nonspecific, causes injury in all species studied, and results in observable distress and probably pain in many individuals [our emphasis].... FPCHT files contain letters from trappers whose motivation for working on new traps was dissatisfaction with legholds or even remorse for having caused suffering to animals they had trapped with inadequate devices in the past." (p. 129) The report also notes that recent evidence suggests an "excellent potential" for footsnare traps for raccoon, fisher, lynx and bobcat. Selected FPCHT recommendations are presented below:

- That most of the traps in use in Canada be modified or replaced.

- That the jurisdictions accept the criteria for killing-traps, which are anticipated to be accepted as a national standard for humane animal traps through the Canadian General Standards Board.

- That work continue to develop more fully humane trapping systems, especially in the following areas: field testing and development of sets; development and testing of holding devices for larger species; development of kill-thresholds (lowest level of energy applied at a given location which will consistently kill the animal) for power-snares; completion of the assessment of the relative effectiveness of various snare/lock combinations; continuation of kill-threshold work for all species, including a continuing reappraisal and redefinition aimed at reducing acceptable time-to-death period.

- That jurisdictions recognize the importance of trapper-training.

- That jurisdictions be aware of the importance of a consistent performance in killing-traps, and that mechanisms be developed to monitor and maintain quality control in trap manufacture.

- That safety devices or mechanisms be provided with or incorporated into all modern killing-traps (except those designed for squirrel or weasel), to minimize the risk of injury to the trapper.

The full *Report of the FPCHT* (144-GP-1MP) is available from the Canadian

Government Specifications Board, Hull, Quebec K1A 0S5, Canada.

Toxocariasis a Public Health Concern

Toxocariasis, known commonly as roundworm, is gaining recognition as a serious health risk for human beings, particularly for children who share their homes with one or more dogs. According to a report in *California Veterinarian* (35(7):17-18, 1981), toxocariasis is a threat to people who ingest the infective eggs of *Toxocara canis* found in grass, soil, feces and other materials. Infection caused by *Toxocara* eggs may take one of two forms: the classical visceral larva migrans (VLM) syndrome, or the ocular version (OLM), which may lead to retinal disease and serious loss of vision.

The most effective means of protection against toxocaral disease is prevention. Treatment of puppies as young as 2 weeks of age is recommended, as it is reasonable to assume that all newborn pups are infected with *T. canis*, transmitted to them from their mothers. Repeated treatments are necessary to avoid further infection that can subsequently develop from infective eggs in the environment. Lactating bitches, which may carry the infective ova in their milk and transmit it to the pups, should also be treated. *T. canis* infections have a lower incidence among dogs over 6 months of age, with risk decreasing with age (except for lactating bitches).

Children 1-6 years of age are considered most vulnerable to infection, as this age group most frequently exhibits pica, the habitual consumption of non-food items. According to one study, children with a history of pica were 20 times more likely to have elevated *Toxocara* antibody titers than those who did not have the habit. Exposure to infected pets certainly increases the risk, but infection may also result from ingestion of eggs in grass or soil from areas such as public parks, schoolyards and playgrounds with sandboxes.

While veterinarians are aware of the high incidence of roundworm infection in dogs, only 54% surveyed said that they advised their clients of the risks of human toxocariasis infection. Another 29% stated that they discussed the risks if the client brought up the subject.

One outcome of a 1976 National Conference on Dog and Cat Control, along with the efforts of the World Health Organization, was the formulation of general recommendations to control dog- and cat-borne zoonoses. These include reducing the number of stray or poorly supervised dogs and cats; keeping pavements and public places free of dog feces, as well as excluding dogs from children's play areas; enforcing leash laws; educating the public about health risks and promoting the concept of responsible pet ownership; maintaining the good health of pets, free of roundworms, by appropriately timed veterinary treatment.

Mutilation of Farm Animals

The Farm Animal Welfare Council of the United Kingdom has published an updated report on farm animal mutilations. The Council defines mutilation as "any procedure carried out with or without instruments which involves interference with the sensitive tissue or bone structure of an animal and is carried out for nontherapeutic reasons." The Farm Animal Welfare Council has recommended the lowering of the age limit for animals at which unqualified, i.e., non-veterinary persons may carry out certain procedures. The castration of bulls, boars, rams, and goats above the age of 2 months should be performed only by a veterinarian. The Council stipulates that anesthetics should be mandatory when those animals are castrated over the age of 2 months. The removal of teats in calves generally for cosmetic reasons should be performed only by a veterinarian in animals over 3 months of age. The Council also opposes the complete tail-

docking of certain breeds of sheep for show purposes, recommending instead that at least 4 tail vertebrae be retained. The report also stresses that stockkeepers should have basic training in the performance of routine mutilations and that there is scope for expansion of training and certification in such procedures. (At this time in the UK, livestock husbandrymen can obtain a certificate of proficiency in the husbandry of a particular species without, however, receiving specific instruction on mutilations in the course leading to certification.)

The report proposes banning the following procedures: freeze dagging (removal of the fleece from ewes' vulva area using cryogenic substances); the short-tail docking of sheep; penis and tongue amputation; cockerel devoicing; and the hot-iron branding of cattle.

Vasectomy, surgical dehorning, dis-budding of sheep and goats, and electro-ejaculation, though not strictly a mutilation, should be performed only by qualified veterinarians.

Livestock and the Weather

When Cole Porter penned the words of his immortal song, "It's Too Darn Hot," he was probably unaware that they revealed a similarity between the sexuality of men and that of boars. Just as Porter's "average man... much prefers his lovey-dovey to court when the temperature is low," your boar's lack of interest in his mate could be due to nothing but the weather. Researchers have recognized for some time the link between the unreadiness or inability of livestock to mate (and conceive) and climatic conditions, as evidenced, for example, by the effects of heat stress on spermatogenesis in boars. The influence of the physical environment on the well-being of livestock is becoming clearer as meteorologists and animal scientists collaborate. According to a report in the *Veterinary Record* (109:49-50, 1981), these interactions, once understood, may enable one to predict the rhythms

of disease outbreaks based on correlations between past weather conditions and the incidence, location and seasonal occurrence of disease. Through observations and calculations of animal responses to the environment, preventive measures may be taken to control or minimize the incidence of stress, airborne viral infections and parasitic infestations.

Disposition of Pets in Wills

Last year a dog named Sido attracted considerable attention when he became the object of a legal battle between the San Francisco Society for the Prevention of Cruelty to Animals and the executor of his owner's estate. The owner had expressly stated in her will that after her death, Sido was to be euthanized by a veterinarian. The San Francisco SPCA intervened, taking custody of the dog and refusing to release him. A highly publicized lawsuit (Smith vs. Avanzino, 1980) filed by the executor of the will resulted in passage of a special state law to save Sido and a court decision invalidating the provision of the will.

Requests in wills for euthanasia of pets upon the owner's death are apparently not uncommon. Frances Carlisle, of the University of California School of Law at Davis, surveyed 25 veterinarians in the Los Angeles and San Francisco areas and found that 28% of them had been named in wills for this purpose (*Calif Vet* 35(7):26-27, 34, 1981). Carlisle goes on to outline for the benefit of the veterinarian the ambiguities in existing laws regarding the destruction of animals and points out their inadequacy in resolving conflicts involving strong public opposition to willed requests for euthanasia of pets.

Generally, all provisions in a will are to be enforced unless 1) the disposition violates public policy, or 2) the disposition does not reflect the true intent of the deceased. These exceptions yield three interpretations that can be

used to bolster arguments against implementing willed requests for euthanasia of pets. First, as pets hold the legal status of personal property, and public policy dictates against enforcement of wills that provide for the wasteful or capricious destruction of the estate property, one could argue that destruction of pets would violate public policy. For animals with economic value, such a charge could more easily be established, as this exception most commonly refers to property with economic value. However, most pets are of little or negative economic value (they have to be housed and fed), and as there are no specific prohibitions against the destruction of property with no value, a court could rule against this kind of a challenge. In cases where one could not argue against the destruction of an animal that is regarded as having no economic value, one could appeal to the public policy against the capricious destruction of estate property. The killing of a companion animal may be considered capricious if alternatives such as adoption exist. A court could nevertheless uphold a provision to destroy the pet on the grounds that it is not capricious to euthanize an animal if the intent is to ensure that it will not starve as a stray or be subject to painful experimentation.

Second, the various state laws that protect animals from cruelty, neglect, abandonment and destruction may be considered applicable to the case at hand. In *Smith vs. Avanzino*, the court reasoned that although Sido was not abandoned, the dog should still be entitled to the same protection afforded an abandoned animal in California, i.e., a 10-day grace period before it can be killed, during which time efforts are made to place the animal. However, a court could reason just as easily that because an animal is not, in fact, abandoned (it is mentioned in a will), it is not a proper subject for statutory protection.

The third and most common method used to invalidate willed provisions for euthanasia of pets is demonstration to the court that the provision does not

represent the true intent of the deceased owner. This may involve either reinterpreting the will to show that the provision was made out of the desire to protect the pet from the pain and suffering that could result from abandonment, or by convincing the court that had the owner been aware of alternatives, e.g., placement in a private home or adoption by an animal welfare agency, he or she would have wanted that course of action taken. The court could argue, however, that despite the existence of alternatives, the owner did not intend the animal to live.

As reflected above, an animal in Sido's position is in a precarious situation, its fate subject to varying interpretations of ambiguous laws. Carlisle calls for specific legislation to serve directly in disputes that arise in such cases. Such legislation would invalidate provisions indicating automatic euthanasia and replace them with conditional provisions, which would request euthanasia only after attempts at placement fail. For the time being, however, the veterinarian, without the guidance of a professional code of practice on the euthanasia of healthy animals, remains caught in the middle, ethically if not legally.

(Sido, a high-strung, demanding dog whose owner had wanted him euthanized because she felt that he would be unable to adjust to a new owner, was adopted by Richard Avanzino, president of the San Francisco SPCA.)

Dutch Figures on Animal Experiments

At an informal meeting of scientists and animal welfare advocates in Utrecht on 10 September 1981, Drs. H. Roze-mond of the Dutch Veterinary Inspection Service reported on the use of animals in laboratories in the Netherlands for 1980. The total experimental use was 1,486,639 animals, with mice (56.7%) and rats (24.3%) accounting for 80% of this figure. The number of animals used in 1980 has declined by 12% in comparison with 1979 although it is

not clear whether this is due to economic constraints or to an active commitment by researchers to reduce their use of laboratory animals.

The breakdown of purposes for which animals were used is as follows: production and testing of biologicals, 17.5%; toxicology and pharmacology, 35.5%; diagnosis and similar activities, 6.9%; instruction and training, 0.8% and other research, 39.3%. In toxicology and pharmacology, most of the animals were used in the discovery and testing of medicines. Toxicity testing accounted for 7.8% of the national demand for laboratory animals, with acute tests accounting for over two thirds of this demand.

The Dutch authorities request information from researchers on the degree of discomfort to which the animals are or are likely to be exposed. They acknowledged that it is sometimes difficult to assess discomfort in animals, but consider the information useful in that it raises the awareness of researchers and by extension, of the public. The information compiled for 1980 broke down as follows: no appreciable discomfort, 37.8%; experiments performed under anesthesia, 10.7%; experiments with risk of appreciable discomfort, 41.4% and any other discomfort (multiple effects), 10.1%.

UK Animal Experiments—1980

For the fourth consecutive year, the number of animal experiments performed annually in Great Britain has declined (see Table 1).

Some sectors of the research and testing community have reduced their use of animals more than others (see Table 2). The sector labelled as "other non-profit groups" probably includes Wellcome Laboratories, one of the major pharmaceutical and vaccine manufacturers in Britain. However, they turn over their profits to the Wellcome Foundation and thus qualify as a non-profit group. The government sector includes hospitals but not medical schools.

When one looks at some of the specific research areas, some intriguing patterns emerge. Animal research on tobacco products has fallen from 15,200 experiments in 1977 to 1,900 in 1980. Cosmetics research has increased from 24,600 to 31,300 experiments over the same period but application of substances to the eye has fallen from 31,400 to 22,800. Animal research on burning or scalding has fallen from 6,600 to 1,900 experiments and infliction of other physical trauma from 17,100 to 3,000. It is, of course, impossible to tell from the figures alone whether some of these changes are due to increased activity by

antivivisection groups. Another interesting statistic concerns the number of animal experiments conducted for carcinogenicity testing. From 1977 to 1980 the number varied from 62,600 to 51,000 to 58,500 to 39,900. This may indicate a downward trend which, in turn, may be the result of an increased availability of *in vitro* techniques for carcinogenicity screening.

It has been argued that the demands of new legislation, such as the Health and Safety at Work Act, 1974 in Britain, will increase the number of animals used. To date, this prediction has not been realized (see Table 3).

TABLE 1

Year	Thousands of Experiments*
1976	5,474.7
1977	5,385.6
1978	5,195.4
1979	4,719.9
1980	4,579.5

*The use of ten animals in one project is counted as ten experiments. These figures are thus roughly equivalent to the number of animals used.

TABLE 2

Type of Place	Thousands of Experiments			
	1977	1978	1979	1980
Facilities of higher educ.	908.4	974.1	1,014.4	933.0
Other non-profit groups	858.3	779.5	614.0	546.9
Government (& related) laboratories	858.6	753.3	687.7	710.5
Commercial concerns	2,760.4	2,688.6	2,403.8	2,389.0

TABLE 3

Legislative Requirement	Thousands of Experiments			
	1977	1978	1979	1980
Medicines Act (1963) (or overseas equivalent)	212.1	227.9	223.5	220.5
Batch quality control (vaccines, etc.)	707.2	703.4	641.4	637.7
Health & Safety at Work Act (1974) (or overseas equivalent)	144.6	159.5	115.5	125.9