

EDITORIAL

A Chronology of Significant Events, Meetings, and Publications Concerning the Welfare of Laboratory and Farm Animals

Andrew N. Rowan, Editor-in-Chief

Introduction

It is not readily appreciated, except for those of us who are deeply involved in the animal movement, how the debate on animal rights and animal exploitation has grown and spread over the past ten years. It may, therefore, be of some interest to readers to have a chronology of important events and publications from the past decade. The outline is not meant to be comprehensive and others would no doubt highlight different events, but it is hoped that it will prove to be of interest and of use. The philosophical, legislative and scientific aspects are dealt with separately for the sake of simplicity although they are really overlapping sections of a single movement.

A. Animal Rights Philosophy

The philosophical works and major bursts of activity are clustered around three main periods: 1870-1900, 1955-1960 and 1975-present. The major work prior to 1975 is undoubtedly Henry Salt's *Animals' Rights* (1894). (This has been reprinted with an added bibliography and is available from the Society for Animal Rights, Clarks Summit, PA for \$9.75.) The most recent spurt of activity started with the publication of *Animals, Men and Morals* by Godlovitch et al. (1971). This was not a particularly detailed or academic publication, but it did stimulate others to produce works such as *Victims of Science* (Ryder, 1975) and *Animal Liberation* (Singer, 1975). Ryder's book, in which he introduced the term 'speciesism,' aroused much passion and concern among members of the general public although it was widely criticized as inflammatory and inaccurate by the biomedical community. Singer's book was also a popular work, but it focused on the philosophical arguments. Its clear and simple prose served to make the arguments intelligible to a far wider audience than is usually the case with philosophical works and it is probably the most influential of all the works which have appeared since 1970. Other recent books include those by Andrew Linzey (1976), Tom Regan and Peter Singer (1976), Stephen Clark (1977), Richard Morris and Michael Fox (1978), and Mary Midgley (1979). Of these, the book by Clark contains the most detailed academic arguments. The first major development of the argument that animals do not have rights, in response to the above works, has just now appeared (Frey, 1980).

In addition to these publications, more and more professional philosophers are showing an interest in the subject. In 1977, the Royal Society for the Prevention of Cruelty to Animals held a two day meeting at Cambridge (U.K.) on the subject of animal rights (Paterson and Ryder, 1979). At a meeting of Texas A&M University in 1977 on the ethics of human and veterinary medicine, one of the speakers specifically addressed the question of animal rights (Caplan, 1978). In 1979, there were meetings at the Virginia Polytechnic University in Blacksburg and at the University of Guelph (Lehman, 1980) at which both scientists and philosophers explored the concept of animal rights and its implications. It is also noteworthy that a number of philosophical periodicals (*Ethics*, Vol. 88 (1978);

Philosophy, Vol. 53 (1978); *Inquiry*, Vol. 22, Nos. 1-2 (1979); and *Etyka*) have recently devoted entire issues to the question of animal rights.

Universities have begun to establish courses specifically on the subject of animal rights and its social implications. Among the first in the U.S. were North Carolina State University, Moorhead State College (Minn.) and Colorado State University. The course at Colorado State University is now required for students in the veterinary school and a similar course has been set up for students at the state veterinary school in Michigan. Another significant development was a meeting organized by the Yale University School of Forestry and Environmental Studies in February 1980 to discuss the role of animal welfare in a proposed graduate program on the interaction of society and animals, particularly wildlife. This graduate program has now been funded for the years 1981-1986 by the Geraldine Dodge Foundation.

B. Government Legislation and Regulation

(i) Laboratory Animals

In 1876, the United Kingdom passed the Cruelty to Animals Act, the first bill to regulate the use of animals in experiments. Over the next 100 years, most industrialized countries passed some type of legislation dealing with laboratory animals, but there has been a significant increase in government activity in this sphere over the past fifteen years.

Britain: In 1965, the Littlewood Committee in Britain reported on the workings of the Cruelty to Animals Act, 1876 and concluded that although the legislation had worked in principle, some major changes were necessary. However, only a few changes were made at the administrative level because the U.K. government did not consider the issue to be particularly important. In 1977, a radical change in the attitude of the Labor government was observed. The Prime Minister stated during question time in the House of Commons that it was his intention to encourage the rapid development and use of alternatives to laboratory animals. In 1978, this was followed by a letter to all licensed researchers from the Home Office (which administers the British 1876 Act) strongly urging them to use alternatives wherever feasible, to develop new alternatives and to publish the results of such research so that their colleagues might make use of any new developments.

The Labour Party then issued a policy document on animal protection which contains some wide-ranging proposals on both laboratory animals and farm animals (The Labour Party, 1978) and both the Conservatives and Liberals have followed suit. In 1979, two bills were introduced into the British Parliament to revise the 1876 Act. The first, introduced by Lord Halsbury in the House of Lords, was subjected to extensive review and revision (House of Lords, 1980). Since the Select Committee contained articulate representatives from both the research and animal welfare communities, the final product represents a workable political compromise. Unfortunately, the current Conservative government is stalling on its election promise to introduce new laboratory animal legislation and is resisting pressure to accept the House of Lords bill. The second bill, introduced by Peter Fry, was talked out in the House of Commons. The Conservative government has, however, given more power to the Advisory Committee to the Cruelty to Animals Act (1876) and also to the Farm Animal Welfare Council.

United States: In 1966, the Animal Welfare Act (PL 890-544) was passed, covering the handling and care of cats, dogs, primates, guinea pigs, hamsters, and

rabbits used in experimentation. The Act specifically excludes actual experimental procedures from its jurisdiction although a 1970 amendment (PL 91-579) requires research workers to use anesthetics and analgesics where these will not interfere with the results of the experiment. In addition, all registered laboratories now have to file a report outlining the number of animals used (PL 94-279). At the beginning of 1979, new guidelines for the use of laboratory animals were issued by the National Institutes of Health (1978). These required, *inter alia*, that scientists make use of statistical, computer and *in vitro* systems to reduce their requirement for laboratory animals and also that anyone who did (or could) not comply with the new guidelines would not be eligible for an NIH grant. A move to make the NIH guidelines into official regulations was shelved after the personal intervention of senior NIH administrators. However, there is no doubt that there will be further moves in these fields. The U.S. Congressional Clearinghouse on the Future has noted animal legislation as an area of increasing activity over the next few years.

Four laboratory animal bills were introduced into the 96th Congress (1979/80)—three on the topic of alternatives and one (H.R. 6487) seeking to amend the Animal Welfare Act. The first (H.R. 282) called for \$12 million for research into alternatives. The second (H.R. 4479) mandated the establishment of a commission to investigate the topic. The third (H.R. 4805) mandated the establishment of a National Center for Alternatives Research and reallocation of 30-50% of animal research funds to the development of alternatives. Members of Congress have received thousands of letters (some individuals have received over 600 letters) pressing for passage of H.R. 4805. The General Accounting Office has produced a report on the subject and pressure has been applied to the National Institutes of Health to initiate some constructive action. They responded by organizing a symposium on bioassay methodology (*in vivo*, *in vitro* and mathematical approaches) in February, 1981. [This article went to press in January 1981. A report on the NIH meeting will appear in the next issue.—Ed.] The fourth bill (H.R. 6847) addressed the issue of pain and distress in animal research and set forth proposed mechanisms for regulating experiments which could cause suffering.

Europe: In 1968, France published a Decree (No. 68-139) regulating experiments on animals. More recently, a member of the Chamber of Deputies, Monsieur Pierre Micaux, conducted an investigation of animal welfare issues at the request of President Giscard d'Estaing and produced a report with recommendations for future action (Micaux, 1980). In 1972, West Germany passed an Animal Protection Act which decrees, among other things, that animals should only be used if the desired results cannot be obtained by other means not involving animal experiments. In the early 1970's, the Swedish Medical Research Council empowered a committee (now containing three lay members) to consider the ethical aspects of animal experiments funded by the Council (UFAW, 1977). A more recent law (1979) mandates the establishment of ethical committees at government research institutions to screen proposed research projects involving animals. The Swedish MRC has also established a committee on animal research which has a special subcommittee to review the concept of alternatives and to fund research in this area (\$100,000 has been disbursed to date and a symposium on the LD50 test is being planned.) In 1974, Norway passed a new animal protection act which included a section regulating animal experimentation (UFAW, 1977). In 1977, the Netherlands passed a new law which specifically mentioned

that alternatives to laboratory animals should be used whenever possible (UFAW, 1977). In 1979, Dr. Ginjaar, the Dutch Minister of Health, stated that the Netherlands would promote the alternatives concept within the European Economic Community. These activities in the European countries have been complemented by Council of Europe recommendations. (The Council of Europe is an organization of 17 countries designed to promote European harmony and cooperation.) In 1971, the Council of Europe passed Recommendation 621, which contained a number of radical proposals for promoting humane treatment of laboratory animals and the development of alternatives. These proposals proved to be unpalatable; however, the Council's ad hoc committee of experts on animal welfare has drawn up a draft convention on animal experimentation which should be introduced for signature in the near future.

(ii) Farm Animals

Farm animals have, on the whole, not been subject to the same attention and consideration accorded to laboratory animals. In Britain, they were protected by the same anti-cruelty legislation which covered other types of animals. However, the development of intensive farming systems involving the close confinement of the animals has led to the drawing up of specific regulations and guidelines in a number of European countries.

The move to develop government regulation began (as is often the case) with a trail-blazing book by Ruth Harrison (1964) which described the development of confinement systems in Britain. As a result, the government set up a committee which produced the Brambell Report (1965), which has become a standard reference for those discussing farm animal welfare. In 1968, the Agriculture (Miscellaneous Provisions) Act was passed in Britain which made "unnecessary distress" as well as "unnecessary pain" an offense in the treatment and husbandry of farm animals. Although this theoretically includes the idea of behavioral stress, in practice only observed physical suffering is taken into account by the enforcement officers. However, behavioral stress is taken into consideration by at least two other European statutes and treaties. The West German Animal Protection Act (1972) specifies that the Act shall serve to protect the well-being of the animals, and "well-being" is defined as including behavioral factors. The maintenance of normal behavior is one of the goals of the Council of Europe's Convention on the Protection of Animals Kept for Farming Purposes (1976). This Convention has been ratified by many European countries.

Other significant government actions in Europe include Sweden's regulations requiring that new husbandry equipment be properly tested for both effectiveness and humaneness before it can be marketed, as well as initiatives elsewhere calling for the banning of battery cages and moves to label eggs which have been produced in "humane" systems. Recently, a suit seeking the abolition of battery cages for laying hens was brought under the 1972 West German Act and the judge found battery cages to be illegal. The ruling has been appealed, but in the meantime, the West German Minister of Agriculture has asked the EEC to ban battery cages throughout the Community. Egg producers throughout the EEC are naturally very concerned about these developments.

C. Scientific Publications and Activities

(i) Laboratory Animals

In the early 1900's, the Research Defence Society was formed in the United

Kingdom to defend the use of laboratory animals by biomedical researchers. In 1946, a similar organization was established in the United States (in response to the perceived antivivisectionist stance of the powerful Hearst publishing group) under the name of the National Society for Medical Research. Apart from the work of the Universities Federation for Animal Welfare (UFAW), established in 1926, there was little scientific counterbalance to either of these groups, most of the opposition coming from antivivisection groups consisting primarily of non-scientists. In 1959, UFAW sponsored a book by Russell and Burch (1959) on *The Principles of Humane Experimental Technique* which enunciated the principle of Reduction, Replacement and Refinement (the 3R's) to reduce the amount of stress suffered by laboratory animals. UFAW has also held a number of meetings on the subject of animal experimentation and has published a standard handbook on the humane care of laboratory animals (UFAW, 1976). Recently, there has been significant and rapid growth of scientific interest in the subject of laboratory animal use and in the idea of alternatives. An abstract service on alternatives to laboratory animals (ATLA Abstracts) was started in 1973 by a U.K. advocacy group, Fund for the Replacement of Animals in Medical Experiments (FRAME), and about 100 scientific libraries now subscribe to it.

In 1974, the pharmaceutical section of the Royal Society of Health (London) held a meeting on alternatives to animal research. In 1975, the Institute for Laboratory Animal Resources (National Academy of Sciences, U.S.A.) held a meeting on the future of animal and other models in biomedical research and testing (NAS, 1977). In 1976, a retired New York doctor published a solidly researched book on painful experiments on animals (Pratt, 1976). In 1977, a number of professional societies in the U.K. held meetings on the question of animal research and alternatives to it and the British Psychological Society established a working party to consider the whole question of animal research in psychology (BPS, 1979). In 1978, FRAME organized a meeting at the Royal Society of Medicine on *The Use of Alternatives in Drug Research* (Rowan & Stratmann, 1980), which was attended by 150 representatives from pharmaceutical companies in England and Europe. A few weeks later the Research Defence Society published a most significant book on alternatives (Smyth, 1978). Although Smyth's book did not accept that alternatives have as much potential as is sometimes claimed, it did at least accept that the concept has validity. In 1979, the International Association for Biological Standardization considered the question of alternatives at their annual meeting (Rowan, 1980). In response to public pressure, NIH is now committed to holding a conference on alternatives (see earlier). In Canada, a prestigious group of toxicologists has just produced an analysis of the potential for alternatives in drug development and safety evaluation. They recommend that "the federal and provincial government departments and agencies and other organizations and foundations supporting toxicological research, initiate the fund programs with the specific objective of developing and validating non-animal models for use in the safety evaluation process" (CSPCA, 1980).

The subject of animal rights is also being considered. For example, at the 1978 annual meeting of the American Association of Laboratory Animal Science, one of the researchers speaking on nonhuman primate availability directed his audience to pay attention to the topic of animal rights as it would increasingly impinge upon its activities. In April 1979, the College of Medicine in Cincinnati held a meeting on animal rights, alternatives to laboratory animals and other ideas. (The Cincinnati group holds a laboratory animal science meeting every year which is always well-attended as they have a reputation for selecting topical

subjects.) In 1980, the topic has been the focus of several scientific meetings, including one organized by the Association for the Study of Animal Behavior (U.K.) and the American Psychological Association. An analysis of some of the issues and a code of ethics resulting from a closed conference in France have just appeared in the *Journal of Medical Primatology* (9: 1980).

Scientific journals in general are beginning to carry more articles on the topic of animal research and animal rights (e.g., *New England Journal of Medicine* 302:115, 1980). There are now two academic publications available which deal specifically with animal welfare topics: *Animal Regulation Studies* and this journal. In October 1977, the Federation of American Scientists published a newsletter devoted to a report which castigated scientists for taking so little interest in animal welfare issues. The FAS report led to the formation of the Scientists' Center for Animal Welfare. This organization and the Institute for the Study of Animal Problems (established by the Humane Society of the United States in 1975) together provide a nucleus of technical expertise as well as a platform for debate by concerned scientists.

(ii) *Farm Animals*

For a long time, UFAW was the only organization dealing specifically with farm animal welfare. It held a number of symposia on the topic and produced a handbook on farm animal welfare which has become a standard reference text (UFAW, 1971). It also sponsored Ruth Harrison's work, which led to her publication of *Animal Machines* (1964). However, greater interest in farm animal welfare is now being shown by others who deal directly with farm animals or who study animal production science.

Some of the recent publications on this subject include Kiley-Worthington (1977) on behavioral problems of farm animals and Fölsch (1978) on ethology and the ethics of farm animal production. Singer and Mason (1980) have produced a popular book examining farm animal production systems, while a more detailed analysis by Fox (1981) is due out shortly.

Two years ago, a major meeting in Madrid on ethological and economic considerations of farm animal production generated an initiative to establish a world committee on farm animal welfare. (Britain already has a Farm Animal Welfare Committee, as does the European Economic Community.) The Association for Animal Science held a special session at its annual meeting in Tucson, Arizona (1979) on the regulation of farm animals used in research and followed it up in 1980 with a seminar on behavioral research and farm animal welfare. In Europe, a major meeting on the welfare of farm animals under intensive systems was held in Amsterdam in April 1978 (Elsevier, 1980). This meeting was sponsored by all the leading veterinary, animal science and animal protection societies, and demonstrates the extent of dialogue existing in Europe at present. Dialogue in the U.S. between animal science and animal protection groups is now beginning to develop as shown by the growing interest among professional groups in questions relating to farm animal welfare. A recent issue of the agribusiness newspaper *Feedstuffs* (September 8, 1980) contained an editorial and several articles with the message that farm animal welfare would be a major issue for the 80's. Since those articles appeared, the Council for Agricultural Science and Technology, a prestigious policy analysis group, has set up a task force to examine the issue, and the U.S. Animal Health Association has decided that the topic deserves serious consideration after all.

Conclusion

One aspect of the animal welfare movement which has not been touched upon in the chronology is the growth of activist groups who see themselves as defenders of animal rights. Many of the people involved in these groups have either graduated from the civil rights, women's rights, and peace movements, or have studied their tactics and are adopting some or all of their methods. Groups in New York City have played significant roles in halting a cat sex research project in New York (Wade, 1976), getting Amnesty International to drop their support for a research project investigating the effects of electric shocks (simulated torture episodes) on pigs, and having the Metcalf-Hatch pound seizure law in New York state repealed.

A more ambitious project, aimed at effecting a major change in toxicity testing approaches, has also been very successful. The goal of a coalition of over four hundred groups to end the Draize eye irritancy test in rabbits has almost been achieved in that both government and industry are re-evaluating the test to see if it is really necessary and in the meantime, attempting to modify the test to make it more humane. In addition, Revlon has given a \$750,000 grant to Rockefeller University to seek a nonanimal alternative to the Draize (See News and Review.).

In the United Kingdom, there have been numerous raids on laboratory facilities by a group known as the Animal Liberation Front. In general, their activities have not received wide press coverage, but the problem was considered serious enough for the Research Defence Society to issue a booklet advising their members on how to improve laboratory security. An activist element within the Royal Society for the Prevention of Cruelty to Animals is seeking to radicalize the policies of that organization (Wilkins, 1980). Networks of activists have been established such as Co-ordinating Animal Welfare in the U.K. and Animal Rights Network in the U.S. Both organizations perceive the animal liberation struggle as part of a wider political movement to defend all exploited beings (Mason, 1981) and to challenge modern institutions responsible for perpetuating such exploitation.

While it is unclear what the next ten years will produce for animals, one thing is certain: Animal welfare groups, be they perceived as activist or establishment, will become increasingly sophisticated in the methods employed to highlight the plight of animals, and more effective in securing change.

References

- British Psychological Society (1979) Report of working party on animal experimentation, *Bull Br Psychol Soc* 32: 44-52.
- Caplan, A.L. (1978) In *Implications of History and Ethics to Medicine-Veterinary and Human* (L.B. McCullough and J.P. Morris, eds.) pp. 126-135. Centennial Academic Assembly, College Station, Texas.
- Clark, A. (1977) *The Moral Status of Animals*. Oxford University Press, Oxford, UK.
- Canadian Society for the Prevention of Cruelty to Animals (1980) *Report of a Workshop on Alternatives to the Use of Laboratory Animals in Biomedical Research and Testing*. Canadian Society for the Prevention of Cruelty to Animals, Montreal, Quebec, Canada.
- Elsevier (1980) Proceedings of the European Conference on Farm Animal Protection, Amsterdam, 1979, *Anim Regul Stud* 3 (1-2).
- Fölsch, D.W. (ed.) (1978) *The Ethology and Ethics of Farm Animal Production*. Birkhäuser Verlag, Basel, Switzerland.

- Fox, M.W. (1981) *Farm Animal Husbandry and Ethology: Welfare and Ethics*. Garland Press, New York, NY, (in press).
- Frey, R.G. (1980) *Interests and Rights: The Case Against Animals*. Clarendon Press, Oxford, UK.
- Godlovitch, S., Godlovitch, R., and J. Harris (1971) *Animals, Men and Morals*. Gollancz, London, UK.
- Harrison, R. (1964) *Animal Machines*. Vincent Stuart, London, UK.
- House of Lords (1980) *Report of the Select Committee on the Laboratory Animals Protection Bill*. Her Majesty's Stationery Office, London, UK.
- Kiley-Worthington, M. (1977) *Behavioral Problems of Farm Animals*. Oriel Press, Stocksfield, UK.
- Lehman, M., (ed.) (1980) Proceedings of Guelph symposium. Ethical issues concerning the use of animals in agriculture and scientific research, *Anim Regul Stud* 2: 135-258.
- Labour Party (1978) *Living without cruelty: A policy background paper*. Labour Party, London, UK.
- Linzey, A. (1976) *Animal Rights*. SCM Press, London, UK.
- Littlewood Report (1965) *Report of the Departmental Committee on Experiments on Animals*. Her Majesty's Stationery Office, London, UK.
- Mason, J. (1981) Animal rights politics: The need for the human connection, *Int J Stud Anim Prob* 2 (in press).
- Mason, J. & Singer, P. (1980) *Animal Factories*. Crown Publishers, New York, NY.
- Micaux, P. (1980) *L'homme et l'animal*. La Documentation Francaise, Paris, France.
- Midgley, M. (1979) *Beast and Man*. Cornell University Press, Ithaca, NY.
- Morris, R.K. and M.W. Fox (eds.) (1978) *On the Fifth Day: Animal Rights and Human Ethics*. Acropolis Books, Washington, DC.
- National Academy of Sciences (1977) *The Future of Animals, Cells, Models, and Systems in Research, Development, Education and Testing*. National Academy of Sciences, Washington, DC.
- National Institutes of Health (1978) Responsibility for Care and Use of Animals, *NIH Guide for Grants and Contracts* 7(7): 1-8.
- Paterson, D.A. & Ryder, R. (eds.) (1979) *Animal Rights: A Symposium*. Centaur, London, UK.
- Pratt, D. (1976) *Painful Experiments on Animals*. Argus Archives, New York, NY.
- Regan T. and P. Singer (eds.) (1976) *Animal Rights and Human Obligations*. Prentice Hall, Englewood Cliffs, NJ.
- Rowan, A.N. (1980) The concept of the three R's—An introduction, *Dev Biol Standard* 45: 175-180.
- Rowan, A.N. and C.J. Stratmann (eds.) (1979) *The Use of Alternatives in Drug Research*. MacMillans, London, UK.
- Russell, W.M.S. and R.L. Burch (1959) *The Principles of Humane Experimental Technique*. Methuen, London, UK.
- Ryder, R. (1975) *Victims of Science*. Davis-Poynter, London, UK.
- Salt, H. (1894) *Animals' Rights*. MacMillans, London, UK.
- Singer, P. (1975) *Animal Liberation*. Random House, New York, NY.
- Smyth, D.H. (1978) *Alternatives to Animal Experiments*. Scholar Press, London, UK.
- Universities Federation for Animal Welfare (1971) *The UFAW Handbook on the Care and Management of Farm Animals*. Livingston, Edinburgh, Scotland.
- _____ (1976) *The UFAW Handbook on the Care and Management of Laboratory Animals*. UFAW, Potters Bar, London, UK.
- _____ (1977) *The Welfare of Laboratory Animals: Legal, Scientific and Humane Requirements*. UFAW, Potters Bar, London, UK.
- Wade, N. (1976) Animal rights: NIH cat sex study brings grief to New York museum, *Science* 194: 162-167.