

Reflections on the use of animals in research, testing and teaching in New Zealand – a historical perspective

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Introduction

This paper provides some historical context on the development of regulations and policy relating to the use of live animals for research, testing and teaching in New Zealand and emphasises the historical leadership role played by the scientific community, in general, and the Royal Society of New Zealand and the Ministry of Agriculture, in particular. The paper attempts to capture some of the key strategic initiatives of the last 40 years and emphasises, *inter alia*, the communications challenges presented by this complex and sensitive area of public policy.

Before the 1980s, the use of live animals for research, testing and teaching in New Zealand was exempt from the requirements of existing animal welfare legislation, the Animals Protection Act 1960. Throughout the 1970s and 1980s, the Royal Society of New Zealand (Royal Society) had, however, played a facilitatory role in the evolution and adoption of ethical standards for animal experimentation. The key milestones, as reviewed by Reid (1989), were as follows:

- In 1970, the Royal Society established an *ad hoc* committee to survey the supply of laboratory animals.
- In 1974, in response to proposals from the President of the Royal Society, the Minister of Agriculture

and Science approved the establishment of a National Secretariat for Laboratory Animals and a permanent Laboratory Small Animals Committee within the then Department of Agriculture.

- In 1981, the Royal Society established an *ad hoc* Committee on the Care and Welfare of Experimental Animals, which led to the establishment of the National Animal Ethics Advisory Committee (NAEAC) in 1984.
- In 1987, the promulgation of the Animals Protection (Codes of Ethical Conduct) Regulations made the use of codes of ethical conduct obligatory.
- In 1989, in response to a ministerial request, the Royal Society hosted a symposium on “The Use and Welfare of Experimental Animals” to review the effects and effectiveness of the new regulations.

The Australian Council for the Care of Animals in Research and Teaching (ACCART) had been established in 1987 and one of the key recommendations of the 1989 Royal Society Symposium was “that the possibility be explored of New Zealand becoming associated with ACCART or, alternatively, of a similar organisation being set up in New Zealand”.

ACCART becomes ANZCCART

This 1989 recommendation led to a number of interactions involving the Royal Society, ACCART and the Ministry of Agriculture and Forestry (MAF). In October 1991, with the support of NAEAC, MAF wrote formally to the Chief Executive of the Royal Society confirming support for New Zealand joining ACCART, via the establishment of a New Zealand Council for the Care of Animals in Research and

Teaching (NZCCART), with similar aims, objectives and structure to ACCART. This would have enabled New Zealand to join ACCART, as a fourth sponsor, alongside the National Health and Medical Research Council (NHMRC), the Commonwealth Scientific and Industrial Research Organisation (CSIRO) and the Australian Vice Chancellors' Committee.

After further discussion, it was eventually agreed that ACCART would change to ANZCCART, to reflect a true trans-Tasman partnership, and ANZCCART New Zealand was established, in 1993, as a formal Standing Committee of the Royal Society.

Selected initiatives

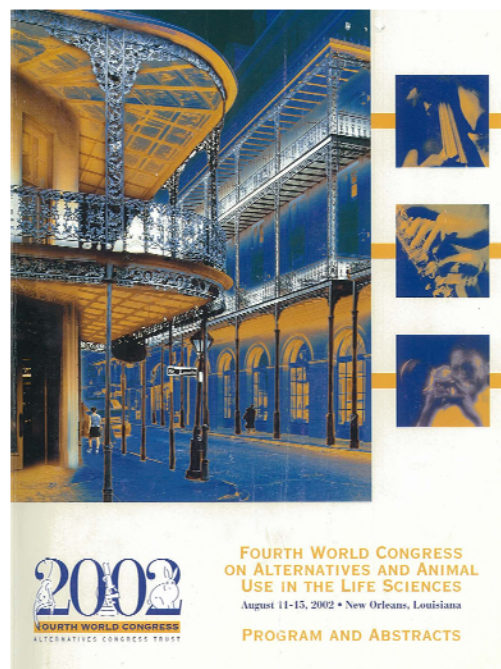
Since the establishment of ANZCCART New Zealand, there has been considerable focus on the relationship between MAF, NAEAC and ANZCCART, to ensure role clarity and synergy in work undertaken of both an operational and strategic nature. MAF played an observer role in the early years of the ANZCCART New Zealand Board and, over the years, several individuals have served on both the ANZCCART Board and NAEAC. A number of very successful joint conferences have also been held and ANZCCART has played a key role in progressing important initiatives, which originated in MAF and/or NAEAC.

One early example of such an initiative arose from a 1993 NAEAC recommendation relating to external compliance monitoring of animal ethics committees (AECs). This was then developed further by ANZCCART, which set up a pilot programme to audit institutional AECs. This was very successful and the principles of the framework used, and lessons learned from the pilot scheme, were extremely valuable when a requirement for AEC review, by MAF accredited reviewers, was included in Part 6 of the Animal Welfare Act 1999.

Other selected specific initiatives which have ensured that New Zealand policy and practice, regarding the use of live animals in research, testing and teaching, continue to represent international best practice include the following:

- New Zealand delegates have participated in the eight World Congresses on Alternatives and Animal Use in the Life Sciences that have been held between 1991 and 2011. The Congresses

have provided a unique international forum where animal welfare and animal rights advocacy groups, industry stakeholders, representatives of the international scientific community and government policy and regulatory officials can meet to discuss and debate the use of animals in the life sciences, with a particular emphasis on progress with development, and implementation, of alternatives to animal use. New Zealand and Australia have consistently made significant contributions to these congresses, as both invited speakers and session chairs, and such attendance has enabled MAF, NAEAC and ANZCCART to build up invaluable international networks, at both personal and institutional levels.



- Such international interaction led directly to the 2003 proposal that NAEAC establish an award to recognise significant contributions to the implementation of the Three Rs (Replacement, Reduction and Refinement). Such awards had been introduced in both Europe and North America, over the previous 10 to 15 years, and have helped to raise both general awareness of the Three Rs and to provide recognition to individuals showing Three Rs' leadership within the scientific community.
- Again borrowing from overseas experience, this time in the United Kingdom (UK), ANZCCART established a New Zealand All Party Animal

Welfare Group, in an attempt to keep interested members of Parliament briefed on contemporary animal welfare issues and trends, both domestically and internationally. Unfortunately, this initiative received only limited support and the group was discontinued after six or seven meetings. It is interesting, however, that such groups continue to be strongly supported both in the UK and within the European Union (EU).

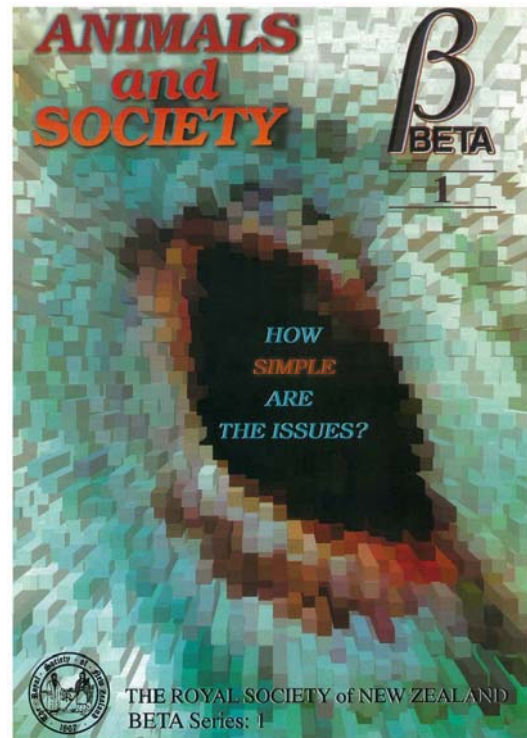
At an organisational level, important New Zealand relationships have also been established, over the last two decades, with the following:

- Canadian Council on Animal Care (CCAC);
- International Council for Laboratory Animal Science (ICLAS);
- Association for the Assessment and Accreditation of Laboratory Animal Care International (AAALAC International);
- Institute for Laboratory Animal Research (ILAR);
- UK Home Office;
- UK Research Defence Society (now Understanding Animal Research);
- UK National Centre for the Three Rs (NC3Rs);
- European Commission (Directorate General for Health and Consumer Affairs (DG, SANCO) and Directorate General Research).

In addition to more general information-sharing benefits, these relationships have also had significant direct benefits. For example, EU recognition of non-animal testing methods for shellfish biotoxins and an OIE focus on encouraging replacement of regulatory testing involving animals, when scientifically validated, non-animal tests are available.

The communications challenge

ANZCCART, in particular, has given priority to encouraging mature and balanced debate on the use of animals in science and ANZCCART conferences, *ANZCCART News*, the ANZCCART website and various initiatives, targeted particularly at the school sector, have served to balance the material published by other groups philosophically opposed to the use of animals in science. The *Beta series* publication *Animals in Society – How Simple are the Issues?* was one particularly successful initiative and the publication *Animal Research Saves Lives* (ANZCCART 1994),



A Culture of Care (NAEAC 2002) and the use of the schools magazine *Tearaway* are also worthy of mention.

In relation to the Three Rs, Rose (1994) describes the communications challenge, in relation to the analysis of animal use statistics, as follows:

[There is] an expectation that trends in the overall numbers of animals used will be an accurate indication of the effective use of the principles of the three Rs. It is argued, if animals are used only when necessary and then the minimum number needed, that overall animal usage will decline. If numbers do not change significantly, or increase, then it is claimed animals are being used unnecessarily. To the frustration of all parties this relationship does not, and indeed cannot, hold.

In emphasising the importance of the Three Rs, Rose further expresses the view that “the constant wrangling over the interpretation of public statistics of animal use will continue until there is wider understanding of, and confidence in, how the principles of the three Rs are pursued in the decisions as to why, and how, animals are used”.

Each year the NAEAC annual report attempts to put animal use statistics in context but, more often than not, media reporting focuses only on the total

number of animals used. The UK experience through the efforts of Understanding Animal Research and the Pro-Test movement shows, however, how a sustained commitment to proactive and balanced communication can influence public and political opinion, in the face of more superficial, emotive and non-science-based communication efforts.

Conclusion

Over a period of only 40 years, a New Zealand regulatory system for the use of animals in research, testing and teaching has been established, which is internationally recognised and held in high regard. It is supported by the complementary roles played by ANZCCART, NAEAC and MAF, and has benefitted considerably from both trans-Tasman and international linkages.

The 1980s policy decision to follow the Canadian and Swedish “devolved, enforced self regulation” AEC model has ensured ethical “buy in and ownership” at both the individual scientist and institutional level and the composition of AEC membership has also ensured important societal input.

Incremental improvements to the regulatory system have been made consistently over the years and it is anticipated that this commitment to “the pursuit of excellence” will continue. The proposed development of a national New Zealand animal welfare strategy and the upcoming review of the Animal Welfare Act 1999 will provide the opportunity to address any matters requiring legislative change. As has been the case historically, it is anticipated that the animal-based science community will actively participate in this legislative review supported by ANZCCART.

As it approaches its first 20 years it is anticipated that the ANZCCART role of promoting:

- excellence in the care of animals supplied for or used in research, testing and teaching;
- responsible scientific use of animals;
- the Three Rs policy of Replacement, Reduction and Refinement as they apply to the use of animals for scientific purposes;
- informed discussion and debate within the community regarding these matters;
- strategic partnerships to contribute to the education and training of scientists, students and the broader community;

will continue to ensure that the animal welfare and ethical considerations involved in the use of animals in research, testing and teaching continue to receive priority attention.

The Russell and Burch assertion “that the greatest scientific experiments have always been the most humane and the most aesthetically attractive, conveying that sense of beauty and elegance which is the essence of science at its most successful” is as relevant today, as a philosophical vision, as it was in 1959.

Acknowledgments

We would like to acknowledge the important roles played by ANZCCART, NAEAC and MAF in providing a New Zealand national regulatory infrastructure for the use of animals used in science and to all AEC members, past and present, for their vital contribution to the welfare of animals used and to ensuring that such use is ethically justified. The administrative support provided by Margaret Handscomb in the preparation of this paper is also gratefully acknowledged.

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