

# Animal Welfare Advisory Committee

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Animal Welfare Advisory Committee  
c/o Ministry of Agriculture and Forestry  
PO Box 2526  
Wellington  
New Zealand

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## 1. FORMER CHAIRMAN'S COMMENT



It is with considerable pleasure that I look back on last year and the passing of the Animal Welfare Act 1999. While its content may not have met all my expectations it represents real (and from the perspective of some who look from afar, necessary) progress. There is now in place a framework against which acceptable and workable standards of animal welfare can be set, and a statement that indicates where New Zealanders stand in this regard.

AWAC, now established as the National Animal Welfare Advisory Committee (NAWAC) under the Act, faces a significant challenge in the deemed code review process that must take place. That is no small task but one I am confident will be achieved within the time frame of three years that has been set.

There are obviously other matters that will have to be dealt with, not the least of which are recommendations which must be prepared for the Minister on those traps and devices that should be prohibited or restricted for use on animal welfare grounds. Keeping abreast of the rapid developments in new gene technologies must also be given attention to ensure potential animal welfare issues are given proper consideration. Such techniques have attracted a great deal of media attention and engendered much public concern in recent times, not so much because of the science itself, but because of public mistrust of the judgement of scientists as to how their findings will be exploited in the future. A public perception also exists that the commercial interests driving many of these research programmes have financial gain in mind without giving adequate consideration to long term dangers that could in the future emerge.

I am somewhat bemused by the inconsistencies in our thinking that relate to matters raised above. Breeding and selection techniques that sometimes create 'diseased' populations compromising animal welfare provide an excellent example. In the Belgian Blue breed of cattle there is a high rate of the 'double muscle' condition - this has been brought about by traditional breeding and selection methods. There are herds of cattle within this breed where the majority if not all breeders have to be delivered by caesarian section because of the calf size associated with this problem. Why no public outcry? Is that the way cattle should be bred? If the same condition were to be produced today using one of the new technologies, would that provoke so little media interest? I think not.

A second example concerns man's best friend, the dog. Here it has been common practice to produce animals with genetically disabled and deformed parts that are thought to be cute and aesthetically desirable. These animals suffer because of this; furthermore scientists cannot be held responsible! If the new biotechnologies were to be used today to achieve a similar result there would be public condemnation, and rightly so. Characteristics of animals can of course be altered using such techniques - the point is that it is not the

technique that is at fault, but the decision made by the breeder (and driven by the desire of his/her clients) to seek such an outcome. A more desirable approach would be to develop these technologies and use them to produce animals that are functionally sound and capable of adapting to an environment that offers a welfare-friendly existence.

My term with AWAC having ended, I take this opportunity to publicly record my appreciation of the contributions so many members of the committee have made over the last ten years. Debate has been constructive, the alternative point of view respected, and consensus on contentious issues almost invariably achieved. As the members come from diverse backgrounds that result is a tribute in itself. The Animal Welfare Group in MAF has given wonderful support – they too have earned my respect and thanks. These are exciting times. To the new chair, Professor David Mellor, I offer my best wishes. Enjoy what lies ahead, there is much that needs to be done.

*Des Fielden*  
Immediate Past Chairman

## 2. CHAIRMAN'S COMMENT

Most people interested in promoting high standards of animal welfare are very pleased that the Animal Welfare Act 1999 has now become law. A major focus of the 40-year-old legislation (the Animals Protection Act 1960) the new Act replaced was defining, preventing, detecting and punishing cruelty. However, since 1960 our understanding of what animals' needs are and how they can be met practically to maintain high standards of health and welfare has improved greatly. Indeed, during the same period animal welfare as a concept was developed, and its features researched and applied to the extent that a new science – Animal Welfare Science – has now evolved. Accompanying these developments has been a transformation in what those who work with animals, and the general public, regard as acceptable and unacceptable treatment of animals. We may expect that our ideas about this will continue to evolve as the next 40 years unfold.

The full spectrum of possible behaviour towards animals ranges from the worst excesses of cruelty to the most benign interactions we can achieve. The new Act binds all of us in New Zealand to a “duty of care” towards animals, whereby we are required to meet the physical, health and behavioural needs of the animals we own or control. So our duty of care covers a much wider spectrum of behaviour towards animals than the mere avoidance of cruelty.

Whereas 40 years ago great weight was placed on avoiding cruelty, today we emphasise avoiding or correcting conditions which compromise animal welfare well above the point where cruelty would become significant. Thus, our attention is still focused mainly on an absence of negative states, but today the range of those states is much wider, not just at the negative extreme. In the years to come we might expect increasing attention to be given to fostering pleasant experiences or positive states in those animal species which can have them. Already some animal welfare scientists are exploring this.

The *National Animal Welfare Advisory Committee* (NAWAC) enters its second decade of activity under its new name which recognises its significance to the whole of New Zealand. It is also clear that NAWAC, with its pivotal role in New Zealand's animal welfare infrastructure, is respected and admired overseas. That is directly attributable to the high quality advice and effort contributed by the Committee until now. Taking over as chairman from Professor Des Fielden, who has so ably chaired the Committee for the past six years, is a daunting prospect – he is a “hard act to follow”. At the same time, the quality of the NAWAC team, their wide experience and their culture of not just getting the job done, but getting it done well, enable me to look forward to my new role. I acknowledge this with gratitude and thank Professor Fielden for his good wishes.

## Safeguards Against Conflicts of Interest

I would like to take this opportunity to clarify the situation with regard to another matter. When my appointment as Chairman of NAWAC was mooted it was identified that there could be perceived conflict of interest with regard to my well-established role as a research provider for MAF operational research projects and my role as chair of NAWAC. A parallel concern related to other animal welfare scientists who also serve the Minister as members of NAWAC.

I discussed this matter in detail both with the Director-General of MAF and MAF Science Policy before I was appointed. I was advised that such situations were not unusual in MAF's experience and MAF was confident that the existing contestable bidding and selection process would both ensure propriety in this matter and allow MAF to continue to benefit from the expert input of the research providers who were also serving the Minister through their membership of NAWAC.

To formulate future NAWAC research recommendations, it was also agreed that the annual update would be done by a subcommittee consisting of non-research providers on NAWAC.

## NAWAC Functions

In exercising its functions under the Animal Welfare Act 1999, I see NAWAC being guided by another Three Rs – Responsibilities, Responsiveness and Reasonableness.

**Responsibilities.** NAWAC's responsibilities, as defined in the Act, include advising the Minister on issues relating to the welfare of animals and developing, and advising the Minister on, codes of welfare. These codes, which are to be developed in consultation with all interested parties, including the public, will provide the details of how we can exercise our duty of care appropriately in different areas of animal use. It is important for all interested parties to note that NAWAC cannot respond to submissions which are not made. Likewise, it will be equally important for interested parties to comment on those features of each code of welfare they wish to see changed *and* those they wish to see retained.

**Responsiveness.** In fulfilling these purposes NAWAC must remain responsive to (a) the needs and wishes of animal industries and other animal-using or animal-owning groups; (b) developments in our scientific understanding of what animals' needs are in the different circumstances in which they are used or kept; and (c) changing perceptions, nationally and internationally, regarding what are acceptable and unacceptable animal uses.

**Reasonableness.** In all of this NAWAC needs to seek a wise balance between current practice, the need for change, the urgency of that need, the practicalities of achieving necessary change, public perceptions here and overseas, and the impact of these factors, and others, on the image of New Zealanders as

responsible and humane custodians of animals.

NAWAC has before it a formidable workload. In addition to revising the six deemed codes during the next three years and advising the Minister on new animal welfare matters as they arise, nine new codes of welfare are scheduled for completion and 13 of the present codes for revision. This will involve a large commitment from all members of the Committee and from all others who join code working groups. The success of the Committee is based on the high quality and range of expertise of its members who occupy senior positions in a range of other organisations. NAWAC business is therefore additional to their daily professional responsibilities. As the incoming Chairman of NAWAC I want to acknowledge that the extra work Committee members willingly undertake in order to promote high standards of animal welfare in New Zealand makes substantial claims on their time and represents a significant public service.

*David Mellor*  
Chairman

### 3. BACKGROUND

Under section 18 of the Ministries of Agriculture and Forestry (Restructuring) Act 1997 (which superseded the Ministry of Agriculture and Fisheries Act 1953), the Minister of Agriculture has the power to establish technical or advisory committees. The Minister approved the establishment of the Animal Welfare Advisory Committee in September 1988. Appointments were made and terms of reference were set in 1989.

Appendix 2 lists the committee's annual reports. For additional information, including previous annual reports, readers are invited to visit the Ministry of Agriculture and Forestry's website at <http://www.maf.govt.nz/animalwelfare/>

### 4. LEGISLATION

The committee is delighted to report that, after a lengthy gestation, new animal welfare legislation passed into law in October 1999. The Animal Welfare Act 1999, as it is known, came into force on 1 January 2000.

The Act has a number of effects which have been described in articles in a wide variety of publications. In addition, in December 1999, the Ministry of Agriculture and Forestry published a policy information paper (no. 27), *Guide to the Animal Welfare Act 1999*. This document is available from

The Manager  
MAF Information Bureau  
PO Box 2526  
Wellington  
New Zealand.

The document is also available on MAF's website at <http://www.maf.govt.nz>

The Animal Welfare Act also means a change of name for this committee from the Animal Welfare Advisory Committee (AWAC) to the National Animal Welfare Advisory Committee (NAWAC). The committee becomes a statutory one with its functions and membership set in law. These changes do not affect the committee's 1999 report and will be described more fully in the annual report for 2000.

## 5. MEMBERSHIP

AWAC members are appointed by the Minister of Agriculture (at one time the Food, Fibre, Biosecurity and Border Control portfolio) for three years on the basis of their experience and expertise, rather than as representatives of the organisations which nominated them.

Professor Fielden retired from the committee in October 1999, having served as a member for 10 years and chairman for six years. Professor David Mellor replaced Professor Fielden as independent chairman.

Mr Robinson retired as Chairperson of the National Animal Ethics Advisory Committee, and therefore as an AWAC member, having served for six years. Mr Robinson's replacement is Mrs Wyn Hoadley.

Dr Orr also completed six year's service and she was replaced by Dr Jan Quay.

The committee's secretary was Ms Kate Horrey. Mrs Pam Edwards and Ms Linda Carsons of the Ministry of Agriculture and Forestry's Biosecurity Authority assist with the work of the committee.

<b>Members</b>	<b>Expiry of Appointment</b>
<b>Professor E Desmond Fielden</b> ONZM, BAgSc, BVSc (Hons), FRCVS, FACVSc, Professor Emeritus (independent Chairperson)	31.10.99
<b>Professor David J Mellor</b> BSc (Hons), PhD, Professor of Animal Welfare Science, Professor of Applied Physiology and Bioethics, Director, Animal Welfare Science and Bioethics Centre, Massey University (independent Chairperson)	31.10.02
<b>Mr A C David Bayvel</b> BVMS, DTVM, MPP, MACVSc, MRCVS, Director Animal Welfare, MAF Biosecurity Authority (Ministry of Agriculture & Forestry nominee)	N/A
<b>Dr Mark W Fisher</b> BSc, MSc, PhD, Senior Scientist, AgResearch, (nominated by the New Zealand Society of Animal Production)	31.10.00
<b>Dr Neville G Gregory</b> BSc (Hons), PhD, Research Scientist, NZ Pastoral Agriculture Institute Ltd (representing animal welfare science)	31.10.02
<b>Mrs Wyn Hoadley</b> LLB (Hons), MA, Dip Tchg, Barrister (Chairperson of the National Animal Ethics Advisory Committee)	31.10.02
<b>Ms Judith N Jones</b> LLB, MBS (Distinction), DipTertTeach, Lecturer, Dispute Resolution Centre, Massey University (nominated by Ministry of Consumer Affairs, Ministry of Women's Affairs and Consumers' Institute of New Zealand)	31.10.01
<b>Mrs Peggy N Loague</b> QSM, JP, President, Royal NZ Society for the Prevention of Cruelty to Animals, (nominated by the RNZSPCA and the Australian & New Zealand Federation of Animal Societies)	31.10.00
<b>Dr Marjorie B Orr</b> BVMS, PhD, Veterinarian, LABNET Invermay (nominated by the New Zealand Veterinary Association)	31.10.99
<b>Mr Alistair R Polson</b> B Ag Sc, Farmer, (nominated by Federated Farmers of New Zealand)	31.10.01
<b>Dr Janet A Quay</b> BVSc, veterinarian, (nominated by the New Zealand Veterinary Association)	31.10.02
<b>Mr Keith Robinson</b> LLB, Barrister (chairperson of the National Animal Ethics Advisory Committee)	31.10.99
<b>Mr Bruce Warburton</b> MSc, Scientist, (nominated by Landcare Research NZ Ltd)	31.10.01

## 6. TERMS OF REFERENCE

AWAC's terms of reference have remained unchanged since the committee's establishment and are reproduced below. However, from 2000, the committee's functions will be those specified in the Animal Welfare Act.

### Broadly

To advise the Minister of Agriculture on all matters relating to the welfare of animals other than those matters which fall within the jurisdiction of the National Animal Ethics Advisory Committee.

### Specifically

1. To review the Animals Protection Act 1960 and advise the Minister on any changes required.
2. To develop codes of minimum standards for the welfare of particular classes of animals and review existing codes.
3. To recommend specific areas where research into animal welfare matters is required.

## 7. OPERATIONS

AWAC meets four times a year. The committee is empowered by the Minister of Agriculture to co-opt additional members for consideration of specific issues. This has generally been achieved by AWAC establishing technical subcommittees for particular projects. Such subcommittees comprise some AWAC members, relevant industry representatives and other technical experts and are a means of ensuring broader consultation and participation than is possible by the core membership alone.

During 1999, the committee decided to review its performance using the performance template developed for the National Animal Ethics Advisory Committee. The review was carried out late in 1999 and covered the following topics

- operation of the committee
- achievement of objectives
- communications
- the development of members' skill base.

## Meeting Attendance 1997 - 1999

Member	20/02/97	25/06/97	29/08/97	28/11/97	03/04/98	03/08/98	11/12/98	05/03/99	21/05/99	20/08/99	17/11/99
Prof E D Fielden	X	✓	✓	✓	✓	✓	✓	✓	✓	✓	-
Prof D J Mellor	-	-	-	-	-	-	-	-	-	-	✓
Mr ACD Bayvel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Mrs F L Clement	X	✓	✓	✓	✓	✓	✓	-	-	-	-
Mr M W Fisher	-	-	-	-	-	✓	✓	✓	✓	✓	✓
Dr N G Gregory	✓	✓	✓	✓	✓	✓	✓	✓	X	✓	✓
Mrs W N Hoadley	-	-	-	-	-	-	-	-	-	-	✓
Ms J N Jones	-	-	-	-	-	-	✓	✓	✓	X	✓
Mrs P N Loague	X	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Dr L R Matthews	✓	✓	✓	X	-	-	-	-	-	-	-
Dr M B Orr	✓	✓	✓	✓	✓	✓	✓	✓	X	✓	-
Mr A R Polson	✓	✓	✓	✓	✓	✓	X	X	✓	✓	✓
Dr J A Quay	-	-	-	-	-	-	-	-	-	-	✓
Mr K Robinson	✓	✓	X	✓	✓	✓	✓	X	✓	✓	-
Mr B Warburton	✓	✓	X	✓	✓	✓	✓	✓	✓	✓	X

✓ Present

X Absent

- Not applicable

## 8. COMMUNICATIONS

### 8.1 AWAC News

*AWAC News* was not published in 1999 due to the significant workload imposed on the secretariat by the passage and implementation of the Animal Welfare Act 1999. However, part of the implementation process was the development and execution of a comprehensive communication strategy regarding the new legislation. This began in the latter part of 1999 and is ongoing.

It is intended to proceed with twice yearly publication of *AWAC News* in 2000.

### 8.2 Conferences

From time to time, various AWAC members or members of AWAC's secretariat are able to attend conferences of relevance to the committee's work. The flow of information and proceedings benefits AWAC's work.

During 1999, the following conferences were attended:

- ANZCCART Conference, The Use of Wildlife for Research, Dubbo, Australia, May 1999
- NZ Society of Animal Production Annual Conference, Mosgiel, June 1999
- RNZSPCA 66<sup>th</sup> Annual Conference, Wellington, June 1999
- New Zealand Veterinary Association Conference, Nelson, June 1999
- NZ Institute of Agricultural Science and NZ Institute for Horticultural Science Annual Convention, Food for Thought: What Will You Be Having for Lunch Next Century?, Auckland, June 1999
- 10<sup>th</sup> New Zealand Companion Animal Council Workshop, Auckland, August 1999
- Third World Congress on Alternatives and Animal Use in the Life Sciences, Bologna, Italy, August 1999
- 26<sup>th</sup> World Veterinary Congress, Lyon, France, September 1999
- Ryegrass Endophyte Symposium, Napier, October 1999
- AWAC/ANZCCART Conference, Innovation, Ethics and Animal Welfare: Public Confidence in Science and Agriculture, Wellington, November 1999

AWAC is delighted to report that its conference, hosted jointly with ANZCCART (the Australian and New Zealand Council for the Care of Animals in Research and Teaching) at Te Papa Tongarewa – the National Museum of New Zealand on 18 and 19 November 1999 was highly successful. Almost 200 people attended the conference, making it the biggest ANZCCART conference ever held. The focus of the first day was ‘Farming Animals in 2020: Issues and Options’. The second day’s theme was ‘Science and Trust: Innovation on the Edge’.

During the conference, time was taken to pay tribute to Professor David Mellor on his retirement from the ANZCCART Board, Professor Des Fielden on his retirement from AWAC and Mr Keith Robinson on his retirement as Chairman of the National Animal Ethics Advisory Committee and member of AWAC.

The conference also hosted the launching of a new publication, *Caring for Animals – A Guide for Teachers, Early Childhood Educators and Students*, by Elizabeth Eppel of the Ministry of Education. The Ministry of Education, the Animals in Schools Education Trust, ANZCCART and the Ministry of Agriculture and Forestry all contributed resources and expertise to the project.

## 8.3 Liaison with Other Bodies

### 8.3.1 National Animal Ethics Advisory Committee

The committee is clearly required to have a close association with the activities of the National Animal Ethics Advisory Committee, particularly with respect to animal welfare legislation and codes of minimum standards for “laboratory” animals. This inter-committee liaison is facilitated by NAEAC’s chairperson being an ex officio member of AWAC.

### 8.3.2 Agricultural Compounds and Veterinary Medicines Advisory Council

Liaison between AWAC and the Agricultural Compounds and Veterinary Medicines Advisory Council is facilitated by the appointment of AWAC’s chairperson and MAF’s Director Animal Welfare (also an AWAC member) to the council. This ensures that the management of potential risks to animal welfare posed by agricultural compounds and veterinary medicines receive appropriate consideration.

In addition, in late 1999, MAF’s Director Animal Welfare was appointed to the Animal Remedies Board for a three-year term.

### 8.3.3 Independent Biotechnology Advisory Council

This body was established by the Government in May 1999 to meet the need for advice and informed public debate on biotechnology. AWAC and the National Animal Ethics Advisory Committee made a joint approach to the council to establish appropriate links between the three bodies. This will be pursued during the coming year.

## 9. STRATEGIC PLAN AND OPERATIONAL PLAN

AWAC’s revised strategic plan was issued in March 1998 and covers the years 1998 to 2003.

The agreed AWAC mission statement remains:

*“To facilitate the development of animal welfare policy and practice for New Zealand”.*

The following specific elements are included in the statement:

- To review legislation;
- To specify/ design animal welfare standards;
- To facilitate awareness of, and to update, codes of welfare;
- To advise on areas requiring further research;
- To consult with relevant interest groups on all activities;

- To advise the Minister for Food, Fibre, Biosecurity and Border Control on animal welfare issues;
- To produce an annual report for the Minister for Food, Fibre, Biosecurity and Border Control;
- To assess relevant information;
- To keep informed on national and international trends.

The strategic plan provides the basis for the development of an annual operational plan.

## 10. CODES OF RECOMMENDATIONS AND MINIMUM STANDARDS

Animal welfare considerations in the keeping of animals continue to increase in importance, both in New Zealand and internationally. Practices, which may once have been deemed acceptable, are now being reassessed and modified according to new knowledge and changing attitudes. High standards of animal welfare are not only important legally, but also have direct economic benefits and are necessary for continued market success. Furthermore, since the health and welfare of livestock and their productivity are interrelated, those responsible for developing quality assurance programmes in the livestock industries are encouraged to incorporate code standards and recommendations where appropriate.

Above all else skilled stockmanship is imperative if animal welfare is to be adequately protected. The codes are intended to encourage all concerned to adopt the highest standards of husbandry with this objective in mind.

All codes produced by the Animal Welfare Advisory Committee emphasise a duty of care to the animals concerned and take account of five basic principles, namely:

- freedom from thirst, hunger and malnutrition;
- the provision of appropriate comfort and shelter;
- the prevention, or rapid diagnosis and treatment of, injury, disease or infestation with parasites;
- freedom from distress;
- the ability to display normal patterns of behaviour.

### 10.1 Code Development

The Animal Welfare Act impacts upon AWAC's codes. From 2000, these will be known as codes of welfare rather than codes of recommendations and minimum standards. The Act also establishes procedures for the development of codes, including a public notification process. The Minister of Agriculture is responsible for issuing the codes.

The transitional provisions of the Act specify that six AWAC codes that were in force immediately prior to the commencement of the Act continue in force for three years (i.e. until 31 December 2002) as if they are codes of welfare issued under the new Act. The six codes concerned, known as 'deemed codes', are:

- Code of Recommendations for the Welfare of Circus Animals and Information for Circus Operators
- Code of Recommendations and Minimum Standards for the Welfare of Animals Used in Rodeo Events
- Code of Recommendations for the Welfare of Exhibit Animals and Information for Animal Exhibit Operators
- Code of Recommendations and Minimum Standards for the Welfare of Pigs
- Code of Recommendations and Minimum Standards for the Welfare of Layer Hens
- Code of Recommendations and Minimum Standards for the Welfare of Broiler Chickens.

The broiler chicken code was the only new code produced during 1999. The remaining deemed codes were reviewed during 1999 to ensure that they complied with the provisions of the new legislation. They have been re-printed with appropriate amendments.

During 1999, AWAC also developed a three-year plan to review all its codes to enable suitable revision and reissue under the Animal Welfare Act. These codes will go through the public notification process.

## 10.2 Publication and Availability

When codes are published, press releases are issued and relevant specific interest group publications are targeted. Appendix 1 lists all published codes.

Codes are available from:

Animal Welfare Group  
Biosecurity Authority  
Ministry of Agriculture & Forestry  
P O Box 2526  
Wellington  
New Zealand

Telephone: 04-474 4129  
Facsimile: 04-498 9888  
E-mail: [nawac@maf.govt.nz](mailto:nawac@maf.govt.nz)

An agreed number of copies of each code are issued free to industry groups affected by the code and key national stakeholder organisations (e.g.

RNZSPCA, Federated Farmers of New Zealand and New Zealand Veterinary Association) to create awareness. A nominal charge of \$5 is made for subsequent copies. Recipients are welcome to photocopy as many additional copies as they wish, as the documents are not protected by copyright.

Most of the codes are also available via the Internet (<http://www.maf.govt.nz/animalwelfare/>). The remaining codes will be placed on the Internet when they are available.

Codes are also promoted at field days and other appropriate conferences and in *Rural Bulletin*.

## 11. RESEARCH

One of the terms of reference for the Animal Welfare Advisory Committee is to recommend specific areas where research into animal welfare matters is required.

Animal welfare is a complex and often emotive subject and it is, therefore, of the utmost importance that attempts to improve existing practices are soundly based. New and ongoing research is essential to identify problems, to develop objective assessments of welfare, and to design and evaluate potential alternatives as well as improved systems of husbandry, transport and slaughter of farmed and other species.

There is no shortage of expertise, enthusiasm and initiative within the research community to tackle the many problems that exist. In many instances the main, even the only, constraint is shortage of funds.

AWAC has been pleased to note that animal welfare research has been recognised by Government in its decision-making on science priorities. The Ministry of Research, Science and Technology and a number of the livestock industries continue to emphasise the need for welfare research on the different animal species farmed for both local consumption and export.

AWAC, as well as encouraging relevant institutions to apply for Public Good Science Fund grants for animal welfare research, also provides details of animal welfare priorities to private sector funding agencies in an attempt to encourage additional funding of applied research that will be of direct benefit to a specific industry sector.

### 11.1 Operational Research

MAF continues to fund relevant animal welfare research projects from its operational research budget. During the 1999/2000 financial year, four projects were funded initially:

- Assessment of calf castration methods - Massey University
- Nose ringing sows - NZ Pastoral Agriculture Research Institute Ltd

- Monitoring conditions on stock trucks - Animal Behaviour & Welfare Research Centre
- Near infrared spectrometry of faecal and blood samples for indicators of animal stress - Animal Behaviour & Welfare Research Centre.

Late in 1999 additional funds became available and three additional projects were able to proceed:

- Dehorning and disbudding - review of the literature - Massey University
- Out-of-season extensive lamb production systems - NZ Pastoral Agriculture Research Institute Ltd
- Pathobiology of organic dairy farming - Massey University.

A list of operational research topics funded by MAF since 1993 may be found in appendix 3. Some projects received partial funding from relevant industry groups.

Many operational research projects result in articles published in scientific journals enabling access to the information by scientists, veterinarians and interested members of the public. Reference details are provided in appendix 3. In addition, MAF Policy publishes annually a document which summarises the results. *1999 Research Results* is available from the MAF Information Bureau and on MAF's website. (Contact details are given in section 4 of this report.)

## 11.2 Research Topics Identified by the Committee

The committee has identified a number of specific topics, outlined below, which need to be addressed and/or where further work is required. This list is neither exhaustive nor developed in priority order.

### 11.2.1 Behavioural and Physiological Responses to Stress

A significant section of the general public have concerns about the behavioural needs of animals subjected to a range of husbandry practices e.g. close confinement, prolonged yarding and/or transport, separation from herd mates etc. Fundamental studies to develop measuring techniques that will objectively measure stress/distress in animals are required; this will permit proper evaluation of the effects of management practices in terms of the stress/distress that is inflicted on the animal including its impact on productive capacity and any unwanted effect on the immune system.

A clearer understanding of sickness behaviour, how and why it may differ under different production systems, could be important. It is generally believed for example that surveillance and recognition of sickness is better under intensive as opposed to extensive systems of husbandry. Recent evidence suggests this may not be so because of the ways sickness behaviour is displayed under different systems. Those who work with and have responsibility for stock management need to be aware of such matters which could

impact on the recognition, treatment and prevention of problems that affect the welfare and productivity of the animals concerned.

### **11.2.2 Extensive Livestock Production**

The primary industries in New Zealand are concerned with extensive livestock production. As such they have much to recommend them with regard to animal welfare and meeting environmental objectives of sustainability. Despite this, there are some negative aspects to these otherwise positive production systems and it is important that these be identified and investigated with the objective of developing methods that will replace or reduce any negative impact.

Specifically, further attention needs to be focused on an evaluation of extensive outdoor pastoral systems for livestock in this country with particular reference to welfare problems associated with nutrition, disease and injury, transport and handling. The use of dogs in meat works is a specific case in point – this is being challenged by some purchasers of the ultimate product. We need to know whether this does result in stress to the animals, the majority of which are well accustomed in this country to being worked by such methods. To eliminate the dog from this environment is likely to result in an increase in both manpower and cost – is that justified? Bruising and emaciation in cull dairy cows is another issue coming under the spotlight – when and why is this occurring and how can be it minimised?

Transport issues requiring attention include factors affecting the microclimate in transporting vehicles; loading densities and partitioning stock of different classes; loading and unloading methods and the facilities required; and pre-conditioning factors for stock undergoing long haul journeys and the requirements for feed, water and rest during transit.

Particular attention needs to be given to an evaluation, and methods of alleviation, of the adverse effects of climatic conditions on the welfare of livestock subjected to extensive systems of management. With the move to highly prolific and milking breeds for example, urgent attention may need to be given to shelter to circumvent losses of lambs at lambing time.

### **11.2.3 Routine Procedures**

While, as a result of recent investigations, objective information is now available on which to base decisions concerning techniques for routine operations such as castration and tailing of lambs, disbudding and dehorning of calves, and develveting of deer, procedures such as amputation of tails in cattle, mulesing, pizzle dropping, beak and claw trimming of hens and induction of parturition in cattle still require consideration. Attention must be paid to their justification, and practical modification and/or alternatives sought where significant welfare impact occurs. Both the short and long term effects of these practices need to be assessed.

#### **11.2.4 Disease Prevention and Control**

Continuing research effort is required into the prevention and control of a number of specific disease conditions that occur from time to time in our pastoral farming system and which have serious welfare implications e.g. facial eczema, ryegrass staggers, internal and external parasitism, deficiencies and/or imbalances in micro-elements.

#### **11.2.5 Nutritional Diarrhoea in Sheep and Cattle**

There is a poor understanding of the causes of diarrhoea associated with the feeding of lush pasture in both sheep and cattle. The welfare costs are high for the animals (discomfort, dehydration, 'ill-thrift', attraction to flies, skin and udder irritation) and in management terms for the farmer with the need for dagging, crutching, tail docking etc. Resolution of the problem is difficult without better knowledge of the underlying causes of the syndrome.

#### **11.2.6 Winter/Early Spring Management of Dairy Cattle**

Depending to some extent on seasonal influences, this is a particularly sensitive period where the welfare of individuals in the herd can be compromised. Social and other stresses, during this period, need to be evaluated to ensure that management procedures are such that unreasonable demands are not imposed on the cattle.

#### **11.2.7 Lameness in Cattle**

A significant welfare problem in many herds is the issue of lameness, in many cases exacerbated by the ongoing increase in herd size, distance walked and quality of race. Strategies to deal with the problem need to be carefully addressed whether by extending existing knowledge or by seeking (and applying) new knowledge.

#### **11.2.8 Bobby Calf Trade**

The bobby calf trade poses important welfare risks because it may be prolonged and involves three phases during which the calves may become hungry, cold and distressed – on the farm, during transportation and in the meat works yards. Research into wellbeing during any one of these phases is only part of the solution to the problem of minimising bobby calf distress. The required outcome is improved welfare (less distress) for the calves and a better quality product, preferably without reducing profits. Careful co-ordination of all three phases is essential to achieve this.

Preliminary research could include a feasibility study to define the current situation and explore ways of achieving better liaison between key players. Selection of works closer to home, provision of electrolytes at strategic parts of the process, alteration of holding yards or transportation crates to prevent chilling, and timing of collection/transportation to ensure killing immediately after arrival are some of the issues worthy of examination.

Sophisticated technology is not required to undertake such studies and the implementation of soundly-based recommendations that could result in improved welfare and a better quality product are likely to be of considerable benefit to the image of the trade.

### **11.2.9 'Natural Care' Sheep Production Systems**

This system of production, as developed for New Zealand conditions, is poorly understood by both countries with which we trade and by a significant proportion of our own population. An objective evaluation of the positive and negative welfare (and other) effects of such a production system would contribute to an understanding of the practice as well showing the way to refine any areas of weakness.

### **11.2.10 Live Sheep Trade**

Continued attention needs to be given to welfare problems associated with live sheep shipments to the Middle East, with particular reference to recurrent problems of pneumonia and inanition. Further refinement of procedures that affect welfare at the time of, and immediately after, disembarkation is a key area that merits a great deal more attention.

### **11.2.11 Preparation of Sheep for Slaughter**

In order to ensure that clean carcasses are presented for killing, sheep have traditionally been washed in the yards before stunning. The methods used are generally stressful and can impair meat quality. Do we know, for example, what effect pre-slaughter stress has on gastrointestinal physiology and microbiology, and the excretion of bacteria?

There is a short period of time between stunning and throat cutting when the sheep is unconscious and its body could be accessible for strategic shearing/washing of the ventral abdomen. If such a post-stunning approach could be demonstrated to be feasible and practical, the result would be less pre-slaughter stress on sheep and better quality meat products from them. Modern meat plants are renowned for innovative technology that facilitates rapid processing on the chain and this approach may well be an option.

### **11.2.12 Vertebrate Pest Control**

Research must continue with the objective of devising more effective and humane methods of vertebrate pest control especially for possums, rabbits, wild cats, ferrets, rats, and mice. Development of more humane trapping systems and evaluation of biological and other methods of control that could replace poisons such as 1080 and phosphorus are required. For example, there is a demand for the development of new generation species-specific poisons. Mode of action and the duration and intensity of impact must be assessed to assist decisions in respect to acceptability or otherwise of pesticides.

### 11.2.13 Transport and Processing of Seafood

An evaluation of commercial practices in respect to the killing and/or transport methods used for eels and crayfish to ensure welfare aspects are adequately addressed is warranted.

### 11.2.14 Bioassays

Development of alternatives/modifications to specific toxicity testing using mouse bioassay for shellfish toxicity as well as the animal tests used for evaluating the efficacy of blackleg vaccine are important - current methods have a serious welfare impact on the animals concerned.

### 11.2.15 Other Research

Apart from the above relatively specific areas of research, the committee believes certain surveys and critical analyses of topics, some of which may already have considerable material published in the literature, are required. This type of research also requires funding. Areas identified by the committee include:

- regular updates of reviews of research carried out on intensive or novel methods of animal husbandry e.g. caged layer hens, pigs kept in stalls, organic farming etc. A particular issue for the pig industry for example is the development of systems, both indoor and outdoor and group-based, which are appropriate in areas of moderate or high rainfall;
- human factors and their influence on animal welfare and productivity with the objective of assessing needs for better training and handling skills when working with animals;
- design of a system for rapid data retrieval concerning alternatives to the use of experimental animals in research, testing and teaching;
- investigations into national and international attitudes and perceptions concerning how farm animals are managed in New Zealand;
- since New Zealand farming conditions and practices are, in many cases, quite different from (even at odds with) those of our trading partners an important question is, will quality assurance schemes ( a number of which are now being implemented in our animal production industries) be acceptable to our customers and to the public in general? Finding out the most practical and acceptable approach to dealing with this issue requires attention;
- the continual increase in animal productivity/performance that is occurring inevitably comes at some cost, either to the livestock producer or the animal, or both. Is there an endpoint, and, if so, how is it to be determined?
- the impact on animal welfare of the developing technologies such as cloning and transgenesis.

## 12. THE YEAR'S ISSUES

### 12.1 Deer Velveting

The deer velveting training and accreditation programme is subject to annual audit. Members of the National Velveting Standards Body (NVSB) attended the May AWAC meeting to discuss the outcome of the 1998/99 audit. The committee noted continued improvement.

### 12.2 Live Sheep Exports

AWAC reviewed four voyage reports during 1999.

AWAC also received a presentation from a member of MAF's Compliance Group on its 1998 audit of the assembly, feedlotting and loading of sheep for export to Saudi Arabia.

### 12.3 Layer Hen Subcommittee

The Layer Hen Subcommittee met once in 1999 to finalise its final report and recommendations to AWAC. The subcommittee's recommendations were considered by the full committee in the second part of the year. AWAC agreed that the Code of Recommendations and Minimum Standards for the Welfare of Layer Hens requires revision.

It was also agreed that the Layer Hen Subcommittee should continue to operate. Given the change in chairmanship of AWAC and the retirement from AWAC of the subcommittee's chairman, it was decided that the subcommittee's membership and terms of reference would be reviewed early in 2000.

### 12.4 Electro-immobilisation

The Animal Welfare Act empowers the Governor-General to make an Order in Council, on the advice of the Minister of Agriculture after consultation with NAWAC, prohibiting or restricting the use of particular traps or devices. Late in 1999, AWAC finalised the tenor of its recommendation to the Minister with regard to electro-immobilisation devices. It is intended to forward this recommendation to the Minister early in 2000.

### 12.5 International Transport of Horses by Sea

AWAC was briefed by Ministry of Agriculture and Forestry officials regarding welfare problems associated with the transport of horses by sea to Australia and further afield. To address these issues MAF convened a workshop in July 1999 to which equine industry, maritime safety, animal welfare and veterinary representatives were invited. AWAC's chairman chaired the workshop which led to the development of agreed standards for horse exports by sea.

## 12.6 Slaughter of Crayfish and Eels

As foreshadowed in last year's report, AWAC briefed the Minister on its concerns regarding the slaughter of crayfish and eels.

The outcome of the MAF-funded operational research on crayfish was published and a press release on appropriate methods of killing crayfish received considerable media attention early in 2000.

## 12.7 Vertebrate Pest Control

### 12.7.1 Subcommittee

During 1999, AWAC considered whether the establishment of a subcommittee on vertebrate pest control was warranted. It was decided not to set up such a group at this time.

### 12.7.2 Phosphorus

AWAC advised the Pesticides Board in May 1999 that its recommendation on the use of phosphorus is as follows.

"When ground control of possums is to be carried out, the first option to be considered by pest managers should be Feratox<sup>R</sup>. Only if the manager has good evidence that this option will not work effectively should phosphorus or other poisons such as the anticoagulants be considered."

AWAC does not support the use of phosphorus in its raw state or in unregistered carriers in any circumstances.

### 12.7.3 Rodent Traps

AWAC considered the welfare implications of two types of rodent traps: glue boards and the 'Rat Zapper<sup>TM</sup>', the latter at the request of an importer.

It is expected that the committee will be in a position to make a recommendation to the Minister regarding these traps early in 2000.

## 12.8 Kosher Slaughter

At present a small number of animals are slaughtered in New Zealand each year to meet the needs of the Jewish community. In the light of a suggestion that kosher-killed meat could be exported, AWAC reviewed its position and advised the Minister that it could not support such a practice. If necessary, trials involving small numbers of animals could be devised to provide further evidence regarding the humaneness or otherwise or the techniques involved in kosher slaughter.

The issues surrounding religious slaughter requirements are to be the subject of a public discussion paper to be prepared by MAF Policy.

## APPENDIX 1

### Published Codes of Recommendations and Minimum Standards

No.	Code	Publication date
1	Code of Recommendations for the Welfare of Circus Animals and Information for Circus Operators	Reissued November 1999
2	Code of Recommendations and Minimum Standards for the Sea Transport of Sheep from New Zealand	September 1991
3	Code of Recommendations and Minimum Standards for the Welfare of Sheep	Revised edition July 1996
4	Code of Recommendations and Minimum Standards for the Welfare of Dairy Cattle	June 1992
5	Code of Recommendations and Minimum Standards for the Welfare of Deer During the Removal of Antlers	July 1992 plus amendments August 1994 & August 1997
6	Code of Recommendations and Minimum Standards for the Welfare of Animals Used in Rodeo Events	Reissued November 1999
7	Code of Recommendations and Minimum Standards for the Welfare of Horses	February 1993
8	Code of Recommendations and Minimum Standards for the Welfare of Bobby Calves	Revised edition July 1997
9	Code of Recommendations and Minimum Standards for the Care of Animals in Boarding Establishments	August 1993
10	Code of Recommendations and Minimum Standards for the Welfare of Animals at the Time of Slaughter at Licensed and Approved Premises	July 1994
11	Code of Recommendations and Minimum Standards for the Sale of Companion Animals	September 1994
12	The Animals Protection Act 1960 and Its Implications for Those Responsible for Farm Animals	Withdrawn
13	Code of Recommendations and Minimum Standards for the Welfare of Pigs	Reissued November 1999

<b>14</b> Code of Recommendations for the Welfare of Exhibit Animals and Information for Animal Exhibit Operators	Reissued November 1999
<b>15</b> Code of Recommendations and Minimum Standards for the Welfare of Animals Transported within New Zealand	November 1994 plus amendment May 1996
<b>16</b> Code of Recommendations and Minimum Standards for the Welfare of Animals at Saleyards	November 1995
<b>17</b> Code of Recommendations and Minimum Standards for the Care and Use of Animals for Scientific Purposes	August 1995
<b>18</b> Code of Recommendations and Minimum Standards for the Welfare of Layer Hens	Reissued November 1999
<b>19</b> Code of Recommendations and Minimum Standards for the Emergency Slaughter of Farm Livestock	December 1996
<b>20</b> Code of Recommendations and Minimum Standards for the Welfare of Dogs	May 1998
<b>21</b> Code of Recommendations and Minimum Standards for the Welfare of Ostrich and Emu	June 1998
<b>22</b> Code of Recommendations and Minimum Standards for the Welfare of Broiler Chickens	November 1999

## APPENDIX 2

### Other Publications

#### Guidelines

Guidelines for the Welfare of Livestock from which Blood is Harvested for Commercial and Research Purposes	April 1996
Guidelines for the Welfare of Yearling Fallow Deer During the Use of Rubber Rings to Prevent Antler/Pedicle Growth	September 1997
Guidelines for the Welfare of Red and Wapiti Yearling Stags During the Use of Rubber Rings to Induce Analgesia for the Removal of Spiker Velvet	September 1998

#### Annual Reports

1990 Annual Report  
1991 and 1992 Annual Report  
1993 Annual Report  
1994 Annual Report  
1995 Annual Report  
1996 Annual Report  
1997 Annual Report  
1998 Annual Report

#### AWAC News

Issue 1 - December 1997  
Issue 2 - December 1998

## APPENDIX 3

### MAF-funded Animal Welfare Operational Research

Year	Year	Institution / Resear	Researcher	Topic	Relevance	Publication Title / Paper	Source
2014	2014	ICAR	Dr G C Westhof	Animal welfare awareness of sheep owners & breeders	ICAR Pastoral Veterinary Research Institute	ICAR Pastoral Veterinary Research Institute	ICAR Pastoral Veterinary Research Institute
2014	2014	ICAR	Dr L R Matthews	Animal welfare awareness of sheep owners & breeders	ICAR Pastoral Veterinary Research Institute	ICAR Pastoral Veterinary Research Institute	ICAR Pastoral Veterinary Research Institute
2014	2014	ICAR	Dr L R Matthews	Animal welfare awareness of sheep owners & breeders	ICAR Pastoral Veterinary Research Institute	ICAR Pastoral Veterinary Research Institute	ICAR Pastoral Veterinary Research Institute
2014	2014	ICAR	Dr L R Matthews	Animal welfare awareness of sheep owners & breeders	ICAR Pastoral Veterinary Research Institute	ICAR Pastoral Veterinary Research Institute	ICAR Pastoral Veterinary Research Institute
2014	2014	ICAR	Dr L R Matthews	Animal welfare awareness of sheep owners & breeders	ICAR Pastoral Veterinary Research Institute	ICAR Pastoral Veterinary Research Institute	ICAR Pastoral Veterinary Research Institute
2014	2014	ICAR	Dr L R Matthews	Animal welfare awareness of sheep owners & breeders	ICAR Pastoral Veterinary Research Institute	ICAR Pastoral Veterinary Research Institute	ICAR Pastoral Veterinary Research Institute
2014	2014	ICAR	Dr L R Matthews	Animal welfare awareness of sheep owners & breeders	ICAR Pastoral Veterinary Research Institute	ICAR Pastoral Veterinary Research Institute	ICAR Pastoral Veterinary Research Institute
2014	2014	ICAR	Dr L R Matthews	Animal welfare awareness of sheep owners & breeders	ICAR Pastoral Veterinary Research Institute	ICAR Pastoral Veterinary Research Institute	ICAR Pastoral Veterinary Research Institute
2014	2014	ICAR	Dr L R Matthews	Animal welfare awareness of sheep owners & breeders	ICAR Pastoral Veterinary Research Institute	ICAR Pastoral Veterinary Research Institute	ICAR Pastoral Veterinary Research Institute
2014	2014	ICAR	Dr L R Matthews	Animal welfare awareness of sheep owners & breeders	ICAR Pastoral Veterinary Research Institute	ICAR Pastoral Veterinary Research Institute	ICAR Pastoral Veterinary Research Institute









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