National Animal Ethics Advisory Committee

Annual Report 2003
National Animal Ethics Advisory Committee

Mission Statement
“To provide independent, high quality advice to the Minister of Agriculture on policy and practices relating to the use of animals in research, testing and teaching.”
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Part 6 of the Animal Welfare Act 1999 provides a process for approving the use of animals in research, testing, and teaching. It is the purpose of the National Animal Ethics Advisory Committee (NAEAC) to advise on ethical issues and animal welfare issues associated with this process and the use of such animals by those involved in research, testing and teaching.

During the past year NAEAC has provided advice and information on the development and review of codes of ethical conduct and considered reports of independent reviews of code holders and animal ethics committees. It has provided information and advice to animal ethics committees through its newsletter, NAEAC News, and, in 2003, at its meetings with code holders in Otago and Auckland. NAEAC intends to continue its practice of scheduling its meetings in centres throughout New Zealand and undertaking site visits to institutions with animal ethics committees. Such visits are a valuable familiarisation and up-skill opportunity and are part of a continuous professional development process for NAEAC members. In addition the workshops associated with these visits provide a valuable opportunity for NAEAC members to meet with those involved in research, testing, and teaching and those serving on animal ethics committees.

Under the Act no person may carry out research, testing or teaching involving the use of animals unless that person holds an approved code of ethical conduct. The Act requires code holders and their animal ethics committees to undergo periodic independent reviews. Independent reviews by a reviewer accredited by the Ministry of Agriculture and Forestry (MAF) must be carried out prior to a code of ethical conduct expiring when the code holder wants to apply for a new code. Eleven reviews by three reviewers were carried out for this purpose in 2003. Both NAEAC and MAF considered the review reports and the revised codes of ethical conduct in detail, and we note that reviewers reported a high level of commitment by animal care, veterinary and scientific staff to the welfare of the animals used for research, testing or teaching purposes. It is our practice at the conclusion of the year’s round of reviews, for representatives of NAEAC and MAF to have discussions with the accredited reviewers, and we note also that reviewers generally found code holders to be well prepared for the review. A particularly noteworthy outcome has been the establishment of a process for reviewers to share key issues arising from the reviews.

NAEAC has an on-going role in advising the Minister of Agriculture on ethical and animal welfare issues arising from research, testing, and teaching. This year NAEAC made two recommendations to the Minister regarding suggested changes to the Act. Also, in its advisory capacity and in response to questions from readers of NAEAC News and participants at NAEAC-sponsored workshops, NAEAC has developed a number of policy guidelines. In 2003 these included policy positions on the definition of scientific community and the length of terms and conditions of appointment of animal ethics committee members.

Part 6 of the Animal Welfare Act 1999 is based on the Three Rs – reduction, refinement and replacement. NAEAC strongly believes in the importance of encouraging the implementation of the Three Rs in New Zealand and to this end, in 2003, successfully launched a new initiative, the Three Rs Award, to recognise excellence in the humane use of animals in research, testing, and teaching.
It has been a busy year and I would like to thank all N A E A C members for their quality input and sincere commitment to the work of the Committee. The Committee wishes to record its appreciation of the contributions made by N A E A C member Dr Barry McPherson who died in May 2003. I would also like to acknowledge with appreciation the valuable and continuing support N A E A C members receive from the staff of the Ministry of Agriculture and Forestry. It would be impossible for the Committee to function as it does without that support.

Wyn Hoadley
Chairperson
2 New Zealand Animal Welfare Infrastructure

2.1 Legal Status of the Committee

The Animal Welfare Act 1999 came into effect on 1 January 2000. At that date NAEAC became a statutory committee with its functions and membership set in law. Prior to that, NAEAC had existed since 1984 as a committee that the Minister of Agriculture was required by the Animals Protection Act 1960 to establish, using powers under the Ministry of Agriculture and Fisheries Act 1953 and later the Ministries of Agriculture and Forestry (Restructuring) Act 1997.

2.2 Infrastructure

The diagram below illustrates New Zealand’s animal welfare infrastructure and the National Animal Ethics Advisory Committee’s role within that framework.
3 Functions

Section 63 of the Animal Welfare Act prescribes the following functions for N A E A C:

- advising the Minister on ethical and animal welfare issues arising from research, testing and teaching
- providing advice and information on the development and review of codes of ethical conduct
- making recommendations about the approval, amendment, suspension or revocation of codes of ethical conduct
- making recommendations concerning the setting of standards or policies for codes of ethical conduct
- providing information and advice to animal ethics committees
- making recommendations on the appointment of accredited reviewers
- considering the reports of independent reviews of code holders and animal ethics committees
- making recommendations about declaring procedures not to be manipulations (under section 3(3))
- making recommendations about the manipulation of non-human hominids (under section 85)
- making recommendations on the approval of research or testing in the national interest (under section 118(3)).
4 The Committee

4.1 Selection of Members

NAEAC members are appointed by the Minister of Agriculture in accordance with sections 64 and 65 of the Animal Welfare Act 1999. The committee has a maximum of 10 members, and a member’s term of office may not exceed three years, although members may be reappointed. Appointments are normally for a maximum of two terms, except in exceptional circumstances.

Under the transitional provisions of the Animal Welfare Act 1999, those individuals who were members of NAEAC when the Act came into force on 1 January 2000 continue in office until the expiry of their term of appointment.

While the Minister has the authority to appoint members, in recent years it has been the policy of successive governments to require appointments to statutory committees to be considered by the Cabinet Appointments and Honours Committee and the Cabinet.

In selecting members (other than the chairperson) the Minister is required to have regard to the following factors:

• the public interest in relation to the use of animals in research, testing and teaching;
• the need for balance between those involved in research, testing and teaching and those who are not; and
• the need for the committee to possess knowledge and experience in the following areas:
  – veterinary science
  – medical science
  – biological science
  – the commercial use of animals in research and testing
  – ethical standards and conduct in respect of animals
  – education issues, including the use of animals in schools
  – environmental and conservation management
  – animal welfare advocacy
  – any other area the Minister considers relevant.
4.2 Members

The table below lists members of the committee during 2003.

<table>
<thead>
<tr>
<th>Members</th>
<th>Expiry of Appointment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mrs Wyn Hoadley QSO, MA, LLB (Hons), Dip Tchg, AMNZPI, Barrister (independent Chairperson)</td>
<td>31.10.05</td>
</tr>
<tr>
<td>Mr A C David Bayvel BVMS, DTVM, MPP, MACVSc, MRCVS, Director Animal Welfare, MAF Biosecurity Authority, (Ministry of Agriculture &amp; Forestry nominee – ex officio)</td>
<td>N/A</td>
</tr>
<tr>
<td>Mrs Barbara J Benson BSc, Dip Tchg, Director of Secondary Education and Senior Lecturer in Science, Dunedin College of Education (nominated by the Ministry of Education)</td>
<td>31.10.03</td>
</tr>
<tr>
<td>Dr Ian J LeGrice BE, Dip TP, BH B, MBChB, PhD, Senior Lecturer, Bioengineering Institute and Department of Physiology, University of Auckland (nominated by the Royal Society of New Zealand)</td>
<td>31.10.06</td>
</tr>
<tr>
<td>Dr Simon C Malpas BSc (Hons), PhD, Associate Professor, Department of Physiology and Bioengineering Institute, University of Auckland (nominated by the Health Research Council of New Zealand)</td>
<td>31.10.04</td>
</tr>
<tr>
<td>Professor John Marbrook MSc, PhD, FRSNZ, Professor Emeritus, University of Auckland (nominated by the Royal Society of New Zealand)</td>
<td>31.10.03</td>
</tr>
<tr>
<td>Dr Roger Macdonald Marchant BSc, BVSc, Veterinary Adviser, Schering-Plough Animal Health Ltd (nominated by AGCARM)</td>
<td>31.10.04</td>
</tr>
<tr>
<td>Dr W Barry McPherson BVSc, Manager, Veterinary Technical Services and Regulatory Affairs, Merial NZ Ltd (nominated by AGCARM)</td>
<td>31.10.04</td>
</tr>
<tr>
<td>Mrs Lynne M Milne BAgSci (Hons), Scientist (nominated by Landcare Research New Zealand Ltd)</td>
<td>31.10.04</td>
</tr>
<tr>
<td>Dr Kathleen H Parton BS, DVM, M S, Senior Lecturer, Institute of Veterinary, Animal and Biomedical Sciences, Massey University (nominated by the New Zealand Veterinary Association)</td>
<td>31.10.04</td>
</tr>
<tr>
<td>Mrs Jennifer M Prattley Royal New Zealand Society for the Prevention of Cruelty to Animals National Councillor (nominated by the RNZSPCA)</td>
<td>31.10.05</td>
</tr>
<tr>
<td>Mrs Joanna J Roberts Reg OT, rural tourism operator (nominated by Local Government New Zealand)</td>
<td>31.10.05</td>
</tr>
</tbody>
</table>

The committee wishes to record its appreciation of the contribution made by NAEAC member Dr Barry McPherson who died in May 2003. He was replaced by Dr Roger Marchant. In addition, Deputy Chairperson Professor John Marbrook retired, having served on NAEAC since 1992. Dr Ian LeGrice was appointed to fill this vacancy. Mrs Barbara Benson was reappointed for a further term.

4.3 Secretariat

Ms Joanna Tuckwell took over from Ms Kate Hellström-Park as the committee’s secretary late in 2003. Mrs Pam Edwards, Ms Linda Carsons and Mrs Margaret Handscomb of the Ministry of Agriculture and Forestry’s Biosecurity Authority assist with the work of the committee.

4.4 Deputy Chairperson

The Animal Welfare Act requires the committee to elect a deputy chairperson at the first meeting of each year. Dr Simon Malpas was elected to fulfil this role.
4.5 Fees

Government policy requires disclosure of fees paid to members of statutory boards and committees. The daily fee paid to committee members is $270 for members and $360 for the chairperson.

Members are paid the fee for attending meetings with an allowance of up to one day’s fee for preparation time. Members are also reimbursed for travelling expenses. In addition, the chairperson and, on occasion, other members may be paid additional fees for representing the committee at other meetings or for carrying out significant extra work on the committee’s behalf.

The table below lists the fees paid during 2003.

<table>
<thead>
<tr>
<th>Member</th>
<th>Fees paid during 2003 (gross)</th>
</tr>
</thead>
<tbody>
<tr>
<td>W Hoadley</td>
<td>$8707</td>
</tr>
<tr>
<td>D Bayvel¹</td>
<td>Nil</td>
</tr>
<tr>
<td>B Benson²</td>
<td>$2160</td>
</tr>
<tr>
<td>B Benson</td>
<td>$540</td>
</tr>
<tr>
<td>I LeGrice</td>
<td>$675</td>
</tr>
<tr>
<td>S Malpas</td>
<td>$2430</td>
</tr>
<tr>
<td>J Marbrook</td>
<td>$3780</td>
</tr>
<tr>
<td>R Marchant³</td>
<td>Nil</td>
</tr>
<tr>
<td>B McPherson¹</td>
<td>Nil</td>
</tr>
<tr>
<td>L Milne</td>
<td>$3780</td>
</tr>
<tr>
<td>K Parton²</td>
<td>$2649</td>
</tr>
<tr>
<td>J Prattley</td>
<td>$2970</td>
</tr>
<tr>
<td>J Roberts</td>
<td>$3375</td>
</tr>
</tbody>
</table>

¹ Mr Bayvel is employed by the Ministry of Agriculture and Forestry and thus does not receive meeting fees.
² Fees are paid directly to the member’s employer to recompense them for time lost from the member’s primary employment.
³ Schering-Plough Animal Health Ltd and Merial NZ Ltd employees forego acceptance of meeting fees in accordance with company policy to act as a good corporate citizen and materially assist public good operations where practicable.

4.6 Operations

4.6.1 Meetings

NAEAC meets six times per annum. Four meetings are general, the remaining two are scheduled to deal specifically with applications for codes of ethical conduct to replace codes that are due to expire.

Temporary working groups are formed to deal with specific issues where necessary. Visitors to the meetings assist the committee with their special expertise or keep the committee informed of significant current developments.

4.6.2 Performance review

The committee regularly reviews its own performance. The system provides members with an opportunity for considered reflection and debate on the way the committee operates. The last review was undertaken in 2002.

4.2.3 Annual Reports

Since 2000, NAEAC has been required by law to provide the Minister of Agriculture with an annual report. In practice, the committee has been doing so for many years. A list of these reports and other relevant publications can be found in appendix 3.
5 Codes of Ethical Conduct

All organisations or individuals which manipulate live animals for the purposes of research, testing, teaching are required to do so in accordance with a code of ethical conduct recommended by the committee and approved by the Director-General of the Ministry of Agriculture and Forestry.

5.1 Transitional Arrangements for Codes of Ethical Conduct

Under the transitional provisions of the Animal Welfare Act, all those codes that were approved and in force on 31 December 1999 continue to have approval for a limited period under the new legislation. Similarly, formal arrangements by organisations/individuals to use another organisation’s code and animal ethics committee also remain in force for a specific period.

The table below sets out the expiry provisions for transitional codes:

<table>
<thead>
<tr>
<th>Date of approval of original code of ethical conduct</th>
<th>Expiry date of code under the transitional provisions of the Animal Welfare Act</th>
</tr>
</thead>
<tbody>
<tr>
<td>On or before 31.12.90</td>
<td>31.12.02</td>
</tr>
<tr>
<td>1.1.91 – 31.12.94</td>
<td>31.12.03</td>
</tr>
<tr>
<td>On or after 1.1.95</td>
<td>31.12.04</td>
</tr>
</tbody>
</table>

Where there is an arrangement to use another organisation’s code, the arrangement is deemed to cease on the date that the code expires.

All code holders and all those who have an arrangement to use a code have been notified of the expiry date of their code or arrangement.

To continue to operate, code holders must submit a new code to MAF for approval. This code has to comply with the provisions of the Animal Welfare Act. It must be accompanied by the report of an independent reviewer, accredited by MAF for the purpose, on the operation of the code of ethical conduct and the animal ethics committee. MAF is required to consult NAEAC on all such applications.

5.2 Requirements of the Animal Welfare Act

From 1 January 2000, new participants in animal research, testing and teaching have been required to follow the provisions of the Animal Welfare Act, which differ somewhat from those of the previous legislation.

Under the Animal Welfare Act, codes of ethical conduct may be approved by the Director-General of MAF, as can amendments, suspensions or revocations of approvals. Except in the case of suspension or revocation at the request of the code holder, NAEAC must be consulted before a decision is made.

For those wanting to use another organisation’s code and animal ethics committee, this requires the parties concerned to reach an agreement and for MAF to be notified of the arrangement, in writing, before any manipulations take place. Termination of the arrangement should also be notified to MAF. Such arrangements, or terminations thereof, are not published in the Gazette.

In addition, while major amendments to codes must be approved by MAF, minor amendments may be made by code holders. However, MAF must be provided with written details of the amendments as soon as practicable after the end of the calendar year in which they were made (and no later than 31 March of the succeeding year). Minor amendments are described in the Animal Welfare Act as ones ‘that would not materially affect the purposes of the code’.
5.3 Activity during 2003

The table below outlines the applications processed and notifications made during 2003.

<table>
<thead>
<tr>
<th>Description</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approvals of new codes</td>
<td>11</td>
</tr>
<tr>
<td>Notifications of arrangements to use an existing code</td>
<td>45</td>
</tr>
<tr>
<td>Approvals of amendments to codes</td>
<td>1</td>
</tr>
<tr>
<td>Notifications of minor amendments to a code</td>
<td>1</td>
</tr>
<tr>
<td>Approval of transfer of code</td>
<td>1</td>
</tr>
<tr>
<td>Revocations of approved codes or arrangements to use a code</td>
<td>1</td>
</tr>
<tr>
<td>Terminations of a notified arrangement to use an existing code</td>
<td>2</td>
</tr>
<tr>
<td>Codes expired and not renewed</td>
<td>2</td>
</tr>
<tr>
<td>Arrangements to use an existing code lapsed</td>
<td>7</td>
</tr>
</tbody>
</table>

2003 saw yet another increase in activity. The principal reason for this is that the second group of codes in place prior to the Animal Welfare Act expired and, in most cases, applications for new codes were made. In addition, all the arrangements in place to use another organisation’s code expire when that code expires. Thus, all those organisations using codes which expired in 2003 had to renew their arrangements with the same code holder, make a new arrangement with another code holder or make a decision to allow their arrangement to lapse. A particularly large number of organisations had arrangements in place to use codes that expired in 2003. Moreover, some new organisations made arrangements in 2003 to use a code that expired later in the year, so their arrangement had to be renewed, meaning they are counted twice within the year.

Details of all codes approved or revoked and arrangements notified or terminated continue to be published regularly in NAEAC News and Biosecurity.

5.4 Approvals in Force

The following table gives details of the number of approvals in force as at 31 December 2003.

<table>
<thead>
<tr>
<th>Description</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of organisations using an approved code</td>
<td>96</td>
</tr>
<tr>
<td>Number of approvals in force</td>
<td>98</td>
</tr>
<tr>
<td>Number of animal ethics committees established</td>
<td>39</td>
</tr>
<tr>
<td>Number of organisations using another organisation’s AEC</td>
<td>64</td>
</tr>
</tbody>
</table>

It should be noted that two organisations have two approvals in force: one uses a different animal ethics committee (AEC) for different types of projects; the other is in the process of changing the AEC it uses. In addition, two organisations have more than one animal ethics committee to facilitate work carried out at more than one campus/location.

The number of organisations using an approved code (their own or another organisation’s) has grown steadily over the last decade. Ten years ago there were only 63 organisations, peaking in 1999 with 98, dropping sharply to 87 in 2002 before increasing again by about 10% last year to stand at 96. While the number of organisations using an approved code has been increasing, the number of animal ethics committees established to deal with projects from all those organisations has been showing the reverse trend. The number of animal ethics committees peaked in 1995 at 51 and has dropped fairly steadily in subsequent years to the current level of 39. This is shown in the graph on page 13.
Appendix 1 lists the organisations with an approved code as at 31 December 2003 and indicates those which have their own animal ethics committee(s). Appendix 2 lists those organisations whose codes of ethical conduct have been revoked (76 at 31 December 2003), most commonly because their activities no longer necessitate a code or after company/organisational mergers where both parties had a code.

It is important to note that the Animal Welfare Act contains a provision that approval of a code is personal to the code holder and not transferable without the consent of the Director-General of MAF. Thus, if a company changes its name as a result of a sale or merges with another entity, this has the effect of revoking the code of ethical conduct approval unless the change is effected with the Director-General’s consent.

5.5 Approvals Not Made by Animal Ethics Committees

5.5.1 Non-human Hominids

The Animal Welfare Act precludes the use of non-human hominids for the purposes of research, testing and teaching unless it is carried out with the approval of the Director-General of the Ministry of Agriculture and Forestry and in accordance with any conditions imposed by the Director-General.

The Director-General is required to consult NAEAC before exercising the powers under these provisions. Furthermore, the Director-General may not approve such research, testing or teaching unless satisfied that the use of the non-human hominid is in the best interests of that hominid, or that it is in the interests of that species and the benefits to the species outweigh any harm to the individual animal.

In March 2003, the Director-General approved the first non-human hominid research project pursuant to section 85 of the Animal Welfare Act. The project is being carried out by a doctoral student and a condition of the approval was that the project also had to be approved by the applicant’s university’s animal ethics committee. The project was approved by the animal ethics committee. The research aims to develop appropriate operant equipment and methodology to assess chimpanzees’ (Pan troglodyte) preference and demand for commodities - environmental enrichment items - in a group setting at a New Zealand zoo and is expected to run until mid-2005. Ultimately the purpose of the research is to obtain information on what captive chimpanzees regard as priorities and to use this information to improve their behavioural and physical wellbeing.
5.5.2 Research or Testing in the National Interest

The Minister of Agriculture may authorise research or testing without the approval of an animal ethics committee, where the Minister is satisfied that such research or testing is necessary in the national interest.

In reaching a decision, the Minister is required to take into account whether the research or testing:

• is necessary to protect New Zealand’s biosecurity interests
• relates to New Zealand’s international obligations
• is necessary to protect human or animal health.

Unless exercising emergency powers under other statutes, the Minister is required to consult NAEAC before making a decision.

No research or testing in the national interest was approved by the Minister during 2003.
6 Animal Ethics Committees

6.1 Communication with Animal Ethics Committees

6.1.1 Visits

NAEAC generally schedules some of its meetings to coincide with visits to code holding institutions. In 2003 it visited code holders in Otago in conjunction with the February meeting and Auckland in conjunction with the November meeting. In addition, the August meeting was held in Christchurch in association with the ANZCCART conference. NAEAC members value the opportunity to meet with those involved in research, testing and teaching and those serving on, or administering, animal ethics committees.

6.1.2 Newsletters

NAEAC continues to publish NAEAC News to communicate policy decisions, relevant information and items of interest to AECs and other interested parties. Sufficient copies of each issue of NAEAC News are sent to all AECs to ensure that each AEC member receives an individual copy. However, the onus remains on recipient organisations to ensure that others within the organisation to whom the publication is relevant (eg researchers, teachers, animal care staff, senior executives) do, in fact, have ready access to it.

Two issues of NAEAC News were published in 2003 (Nos. 19 and 20). For a complete list, see appendix 3.

Another mechanism for communication with AECs is the MAF Biosecurity Authority publication Biosecurity. This six-weekly publication is distributed to those with an interest in animal, plant and forest biosecurity issues and animal welfare. It contains articles that are likely to be of interest and relevance to animal ethics committees.

6.1.3 Conferences

From time to time various NAEAC members, or MAF staff, attend conferences of relevance to the committee's work. Information and proceedings from such conferences are circulated or their availability publicised for the benefit of NAEAC and others involved in the use of animals in research, testing and teaching.

During 2003, the following conferences were attended:

- Royal New Zealand Society for the Prevention of Cruelty to Animals 70th Annual Conference, Christchurch, May 2003
- Australian Veterinary Association/Australian Veterinarians in Ethics, Research and Teaching annual conference, Cairns, Australia, May 2003
- New Zealand Veterinary Association/Commonwealth Veterinary Association Third Pan Commonwealth Veterinary Conference Animal Welfare, Island Nations and Biosecurity, Wellington, June 2003
- Australian College of Veterinary Scientists College Science Week, Surfers Paradise, Australia, July 2003
6.3 Independent Reviews of Animal Ethics Committees

The Animal Welfare Act 1999 requires code holders and their animal ethics committees to undergo periodic independent reviews. Reviews must take place within two years of code approval for new code holders and prior to the expiry of the code for existing code holders who wish to renew their code approval.

Reviews may only be carried out by people who have been accredited by the Director-General of the Ministry of Agriculture and Forestry to carry out such reviews. The pool of accredited reviewers stands at eight (see appendix 4).

In 2002 eight reviews were carried out, all in the code expiry category. In 2003, 13 code expiry reviews were originally scheduled but one code was revoked during the year because the organisation no longer needed a code and another code lapsed and the organisation concerned made arrangements to use another code holder's code and animal ethics committee. Thus, 11 reviews were conducted for code expiry purposes. In addition, two reviews were conducted for new code holders (two-year reviews) and one follow-up review was undertaken.

Both NAEAC and the Director-General of MAF are supplied with a copy of reviewers’ final reports (as required by the Animal Welfare Act). NAEAC’s role is to take the report into account when considering the recommendation it will make to the Director-General on applications for a new code of ethical conduct. It is MAF’s responsibility to determine whether the results of the review are satisfactory or unsatisfactory and to determine what steps the code holder must take to achieve a satisfactory level of compliance.

Reports also contain non-binding recommendations from the reviewer that code holders may find useful.

Once again, representatives of NAEAC and MAF have had discussions with accredited reviewers after this year’s round of reviews. Reviewers generally found code holders to be well prepared for the review, co-operative and welcoming of suggestions for improving their practices. A process has been agreed upon for reviewers to share key issues (not attributed to particular organisations) arising out of reviews.

Early in 2003, NAEAC and MAF jointly wrote to the chief executives of all code holding institutions highlighting generic issues that arose during the 2002 reviews. It is planned to repeat this process in 2004.
7 The Year's Issues

7.1 Suggested Amendments to the Animal Welfare Act

7.1.1 Killing as a Manipulation

The Animal Welfare Act 1999 specifically excludes humane killing of animals for the purposes of undertaking research, testing and teaching on the dead animal or its tissues from the definition of ‘manipulation’. Thus approval from an animal ethics committee to undertake such work is not required under the Act, although it may be an ‘in-house’ requirement in some organisations.

The rationale for this is that animals are killed for a variety of purposes (e.g. food production or because they are unwanted) and killing them for research purposes is essentially no different.

Prior to the Act coming into force in 2000, NAEAC recommended to the Minister of Agriculture that killing animals for research, testing and teaching purposes should be included in the definition of manipulation. The Minister declined to seek an amendment at that time but indicated a willingness to reconsider the matter if the issue continued to generate concern after the Act had been in force for a period.

NAEAC has discussed the issue from time to time and remains of the view that killing animals for research, testing and teaching should require ethical approval (and inclusion in statistics). Not including such animals could be regarded as misleading, and not in accordance with the spirit of Part 6 of the Animal Welfare Act. Requiring AEC approval for such activities ensures that animals are killed for good reason and that they are killed humanely.

NAEAC made a formal recommendation to the Minister of Agriculture on this matter in August 2003. The Minister has asked MAF to undertake a detailed policy analysis of the proposal.

7.1.2 Definition of Manipulation

The definition of ‘animal’ in the Animal Welfare Act 1999 includes ‘any mammalian fetus, or any avian or reptilian pre-hatched young, that is the last half of its period of gestation or development’. Thus any manipulation undertaken in the first half of gestation or development is not considered to be a manipulation under Part 6 of the Act. At the same time as making the recommendation referred to in 7.1.1 above, NAEAC recommended that the definition of ‘manipulation’ be amended to cover ‘any treatment in the first half of the gestation period ... if that treatment interferes with the normal physiological, behavioural or anatomical integrity in the second half of gestation, after birth or in subsequent generations’.

7.2 Commercial Blood Harvesting

NAEAC considered the issue of commercial blood harvesting and whether it does, or should, fall within the definition of manipulation. The legal definition of ‘research, testing and teaching, which is governed by Part 6 of the Animal Welfare Act includes the production of antisera and other biological agents. However, removal of blood by simple venepuncture would not constitute a manipulation. NAEAC thus concluded that commercial blood harvesting should not require approval from an animal ethics committee. Consultation with the New Zealand Food Safety Authority on potential market access issues for sera exports has taken place. Consultation with industry interests is still to occur on whether or not NAEAC will recommend to the Minister of Agriculture that commercial blood harvesting should be exempted from the definition of manipulation in accordance with section 3(3) of the Animal Welfare Act 1999.
7.3 Three Rs Award

A new initiative in 2003 saw NAEAC institute an award to recognise implementation of the Three Rs (reduction, refinement and replacement) in New Zealand. The purpose of the award is to recognise excellence in the humane use of animals in research, testing and teaching. The award is open to individuals or institutions that have made a major contribution to the implementation of the Three Rs.

In 2003, the award was funded by contributions made by the Australian and New Zealand Council for the Care of Animals in Research and Teaching, the New Zealand Veterinary Association and the Massey University Animal Welfare Science and Bioethics Centre.

The prize was awarded to Associate Professor Alex Davies of the Institute of Veterinary, Animal and Biomedical Sciences at Massey University at the ANZCCART conference in Christchurch in August 2003. Dr Davies has focused on the use of computer technology as an alternative to using animals in teaching. He has developed around 40 virtual teaching tools to teach anatomy in a range of animals to veterinary students.

7.4 Animal Ethics Committee Membership

The Animal Welfare Act requires one member of every animal ethics committee to be appointed by the code holder on the nomination of a territorial authority or regional council. That person ‘must not be ... a person who is associated with the scientific community or an animal welfare agency. During NAEAC’s visits to code holding institutions, the question was raised as to what constituted being associated with the scientific community. After consideration of the issues involved, NAEAC finalised a policy position to assist animal ethics committees.

This is reproduced below.

DEFINITION OF SCIENTIFIC COMMUNITY

The membership requirements of every animal ethics committee (AEC), set up under the Animal Welfare Act 1999, include one member who must be a person appointed by the code holder on the nomination of a territorial authority or regional council. Section 101(9) further states that such person must not be in the employ of, or otherwise associated with, the code holder, or associated with the scientific community or an animal welfare agency.

Readers of NAEAC News and participants at NAEAC-sponsored workshops have asked us to clarify what is meant by the words ‘not associated with the scientific community.’

Use common sense approach

It is NAEAC’s view that a common sense approach be used on a case by case basis. The fundamental purpose of section 101 is to limit external members to persons who would be likely to assess research, testing and teaching projects from the perspective of a member of the public, a ‘lay’ person. However, some knowledge of science would not by necessity imply that the person was associated with the scientific community and would also clearly assist the appointee with understanding the complexities of research, testing and teaching project applications. The Act anticipates that the external member will be no more likely to have a scientific or an animal welfare perspective than any other member of the public.
Public perception important

From a public perception point of view it is vital, for the success and credibility of the AEC system under the Animal Welfare Act, that the AECs include persons who are seen to represent the public interest. With this in mind, a conservative interpretation of the meaning of 'associated with the scientific community' would reduce the risk of any public perception that the lay member of an AEC could be "biased."

The overriding principle therefore would be that a lay member has no scientific, financial or philosophical bias, particularly if derived from present or past occupation that would lead to a public perception that he or she represents anything other than the general view of a member of the public on matters classified as research, testing or teaching.

The other issue NAEAC considered during 2003, in relation to AEC membership is the duration of AEC members’ terms. This policy is also reproduced below.

LENGTH OF TERMS AND CONDITIONS OF APPOINTMENT OF AEC MEMBERS

The membership requirements of every animal ethics committee (AEC), set up under the Animal Welfare Act 1999, include three external members appointed by the code holder on the nomination of the New Zealand Veterinary Association (or similar body), an approved organisation such as the Royal New Zealand Society for the Prevention of Cruelty to Animals, and a territorial authority or regional council. Section 101(10) further states that the persons appointed to each AEC shall hold office for such terms and conditions as are specified in the code holder’s code of ethical conduct.

Readers of NAEAC News and participants at NAEAC-sponsored workshops have asked us to comment on the appropriate length of the term or terms for which an appointee to an AEC should hold office and any conditions that might apply.

In responding to this question NAEAC is guided by the information it has received from code holders who have recently reviewed their codes. The terms and conditions of AEC members, while holding office, are set out in the codes. There appears to be general consensus that a defined term of three years is appropriate and that this can be renewed on expiry of the first term for a further term or terms. Conditions of appointment also include mention of whether or not external members are to receive a meeting fee. There is general consensus that such members are to be reimbursed for their out of pocket expenses (travel, telephone/fax etc) associated with their work as AEC members.
7.5 Email Discussion List

AECs have provided feedback that an email discussion list would be a useful resource. NAEAC has been investigating establishing this. There are a number of issues to consider: finance, access, security and the like. NAEAC hopes to be able to make an announcement in 2004.

7.6 Liaison with Other Bodies

7.6.1 National Animal Welfare Advisory Committee

The committee needs to maintain a close association with the activities of the National Animal Welfare Advisory Committee (NAWAC). This inter-committee liaison is facilitated by NAEAC’s chairperson being an ex officio member of NAWAC.

7.6.2 Australian and New Zealand Council for the Care of Animals in Research and Teaching

ANZCCART’s Executive Officer attended the September meeting to update the committee on ANZCCART’s intention to develop educational material regarding the use of animals in research, testing and teaching aimed at the secondary school level.

7.6.3 Animals in Schools Education Trust

NAEAC held discussions with the Animals in Schools Education Trust which also centred on the need for educational material to provide a balanced view of animal welfare and research.

7.6.4 Bioethics Council

Sir Paul Reeves, Chairman of the Bioethics Council, attended NAEAC’s November meeting to outline the council’s work programme and to be briefed on the role of NAEAC. Further liaison is planned for 2004.
8 Statistics

All code holders are required to keep records specified in the Animal Welfare (Records and Statistics) Regulations 1999 in a readily accessible manner. (For record keeping purposes, the term ‘code holder’ includes any person or organisation that has made arrangements to use an existing code and animal ethics committee.)

The records must be retained for a period of five years after the year to which they relate and an annual return of the figures for the previous calendar year must be submitted to the Ministry of Agriculture and Forestry by 31 January each year. In addition, the regulations empower the Director-General of MAF or any inspector appointed under the Animal Welfare Act to obtain copies of records or details from them at any time.

The regulations provide penalties for non-compliance, including late submission of returns or supplying false or misleading figures.

As the statistics are collected by MAF, NAEAC raised with MAF the issue of whether the NAEAC annual report was the appropriate vehicle for publishing the statistical summaries. The Director-General of MAF expressed the view that this is an appropriate and efficient way of disseminating the information and asked that NAEAC continue to include it in its annual report.

8.1 Animal Usage

During 2003, 320911 animals were manipulated – up from 263684 in 2002. The term ‘manipulation’ is defined in the Animal Welfare Act 1999, as are the terms ‘animal’ and ‘research, testing and teaching’ – see appendix 5.

The number of animals manipulated includes 1238 unborn mammals and 1601 birds (all chickens) prior to hatching. This represents a substantial reduction from the previous year in the percentage of birds, as opposed to mammals, in the unborn/prehatched category.

The total represents the second highest number of animals recorded, exceeded only in 2000 when 324395 animals were reported. As such it reflects, at least to some extent, a three yearly cycle. Animals used in long-term projects are not required to be reported every year but every three years and when the project is completed.

Another factor in the increase would appear to be an increase in research work undertaken by the university sector (see section 8.5).

The animal types most commonly used in 2003 were (in order) mice, fish, cattle, and sheep. Apart from 1999, when birds replaced fish, these species, in varying orders, have been the most commonly used since 1995.
The numbers of various species manipulated fluctuate from year to year. While there was a 21.7% increase overall in 2003 compared with 2002, this was not evenly spread across species. Very large percentage increases were recorded in the use of marine mammals, possums, amphibia and dogs, although for amphibia and dogs in particular, the actual numbers involved are not large.

The increase in the marine mammals reported relates to the conclusion of a number of long-term studies on fur seal pup survival, monitoring the health status, breeding and foraging behaviour of sea lions and permanent and temporary marking of New Zealand fur seals and New Zealand sea lions for long-term demographic studies.

The number of possums used reflects the completion of several long-term projects plus active investment by government in research programmes with the aims of finding new sustainable means of controlling possum populations in New Zealand to substantially reduce the negative impacts of this pest on native flora and fauna and preventing the transmission of tuberculosis to livestock and other animals.

Greater numbers in the dog category are also attributable to two major causes. One is the expansion of training courses in canine behaviour and training and the other a major project looking at the response of dogs to vaccination. This has lead to a change to some of the currently accepted wisdom regarding vaccination, which has been communicated to the veterinary profession.

Amphibia numbers are the result of increased research activity arising from increased funding.

Against the general trend of an increase in usage, four types of animals recorded a decrease in numbers manipulated: hamsters, reptiles, birds and pigs.

Miscellaneous species used in 2003 include cephalopods/crustacea (85% of the miscellaneous species total), stoats, ferrets and hedgehogs.

Wherever it appears, the category ‘cats’ includes feral cats.

### 8.2 Source of Animals

Animal users are required to report on the source of the animals manipulated according to specified categories. The table below shows the percentage of animals that came from each source.

<table>
<thead>
<tr>
<th>Source of animals</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breeding units</td>
<td>29.4%</td>
</tr>
<tr>
<td>Commercial sources</td>
<td>13.0%</td>
</tr>
<tr>
<td>Farms</td>
<td>22.8%</td>
</tr>
<tr>
<td>Born during project</td>
<td>5.2%</td>
</tr>
<tr>
<td>Captured</td>
<td>28.3%</td>
</tr>
<tr>
<td>Imported</td>
<td>0.6%</td>
</tr>
<tr>
<td>Public sources</td>
<td>0.7%</td>
</tr>
</tbody>
</table>

As was the case last year, the largest numbers of animals came from breeding units or farms. However, there was a significant increase in the number of captured animals. This reflects the increase in the number of fish, possums and marine mammals manipulated, the majority of which are captured (93%, 96% and 100% respectively).
8.3 Status of Animals

Animal users are required to categorise the status of the animals they use.

<table>
<thead>
<tr>
<th>Status of animals</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal</td>
<td>92.2%</td>
</tr>
<tr>
<td>SPF/germ free</td>
<td>2.1%</td>
</tr>
<tr>
<td>Diseased</td>
<td>0.3%</td>
</tr>
<tr>
<td>Transgenic/genetically modified</td>
<td>2.1%</td>
</tr>
<tr>
<td>Protected species</td>
<td>2.1%</td>
</tr>
<tr>
<td>Unborn/prehatched</td>
<td>0.9%</td>
</tr>
<tr>
<td>Other</td>
<td>0.3%</td>
</tr>
</tbody>
</table>

The number and percentage of transgenic/genetically modified animals reported increased quite substantially. In 2003, 6711 transgenic/genetically modified animals were manipulated (2.1% of all animals). The vast majority were mice, the remainder cattle. This is the largest number of genetically modified animals reported since such records have been kept (seven years).

The percentages of normal and diseased animals showed small increases compared with 2002; all other categories recorded small decreases.

8.4 Outcome

Appendix 3 shows animal use by species and the percentage of animals that died or were destroyed during, or after, manipulations. Usually about half of the animals used die or are destroyed during or after the manipulation. The figure for 2003 is somewhat lower than usual at 44%. The main factor accounting for this is the number of fish that survived in 2003. In 2003, this figure is 85%, but was only 46% in 2002 and 5% in 2001.

The relatively high survivor rates for livestock reflect the number of trials of low invasiveness that take place while the animals remain in their normal farm environment and continue as part of the herd/flock at the conclusion of the trial.

The following histogram depicts information on the proportions of animals surviving for the major species.
8.5 Organisation Type

Appendix 4 shows animal usage by organisation type and the pie chart below depicts this information graphically. The top three user groups were (in order) universities, commercial, and crown research institutes.

The university sector has reported using almost twice as many animals in 2003 as 2002 – the highest usage ever recorded by universities (prior to that the previous highest total was 91808 in 2000). Significant increases were recorded over all animal types. As indicated in section 8.1, this is partly attributable to the three-year reporting cycle for long-term projects. Another major factor in the increase was a large-scale project involving over 50,000 glass eels studying their upstream migration. All but 50 eels remained in the wild at the end of the project.

Other factors included the expansion of a major research centre at one university.

While numbers involved are small (1436 in 2003), the polytechnic/institute of technology sector has been showing a steady increase in animal usage over the past few years. Most animals used by this sector are for teaching purposes, usually for low impact animal husbandry/veterinary nursing or similar training.

Commercial organisations showed a drop in numbers in usage in 2003, back to about the levels reported in 2001.

The level of animal usage in 2003 by crown research institutes is similar to that seen over the previous few years. Similarly, usage by government departments in 2003 was similar to that reported in previous years once the one-off large fish trial in 2001 is discounted.

Usage by those in the ‘other’ category grew substantially in 2003. Organisations in this group include zoos/wildlife parks, individuals, non-university medical research institutes and the like.

8.6 Animal Re-use

Eight percent of animals used in projects reported in 2003 had been used before. This compares with 4.9% in 2002, 2.3% in 2001, 17% in 2000 and 5% in 1999.

Domestic animals, including livestock are more likely to be reused than rodents.
8.7 Purpose of Manipulation

Organisations provide information on the purpose of the manipulation. The table below shows the breakdown and compares the figures with those reported last year.

<table>
<thead>
<tr>
<th>Purpose of manipulation</th>
<th>% of animals used in 2002</th>
<th>% of animals used in 2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Species conservation</td>
<td>3.1%</td>
<td>1.8%</td>
</tr>
<tr>
<td>Environmental management</td>
<td>5.5%</td>
<td>2.6%</td>
</tr>
<tr>
<td>Animal husbandry</td>
<td>6.6%</td>
<td>3.7%</td>
</tr>
<tr>
<td>Basic biological research</td>
<td>32.6%</td>
<td>36.2%</td>
</tr>
<tr>
<td>Medical research</td>
<td>11.5%</td>
<td>12.5%</td>
</tr>
<tr>
<td>Veterinary research</td>
<td>10.6%</td>
<td>14.8%</td>
</tr>
<tr>
<td>Commercial work</td>
<td>20.1%</td>
<td>17.5%</td>
</tr>
<tr>
<td>Teaching</td>
<td>10.0%</td>
<td>10.5%</td>
</tr>
<tr>
<td>Other</td>
<td>&lt;0.1%</td>
<td>0.4%</td>
</tr>
</tbody>
</table>

There are no major changes when considering 2002 and 2003 figures. Increases of the order of 3-4% occurred in the areas of basic biological research and veterinary research, while a similar decrease occurred for commercial work and environmental management.

8.8 Grading of Animal Manipulations

Animal manipulations are graded according to the following five-point severity scale:

- a manipulation that causes no stress or pain or virtually no stress or pain (‘no suffering or virtually no suffering’)
- a manipulation that causes stress or pain of a minor intensity for a short duration (‘little suffering’)  
- a manipulation that causes stress or pain of a minor intensity for a long duration or of a moderate intensity for a short duration (‘moderate suffering’)  
- a manipulation that causes stress or pain of a moderate intensity for a long duration or of a severe intensity for a short duration (‘severe suffering’)  
- a manipulation that causes stress or pain of a severe intensity for a long duration or of a very severe intensity for any duration (‘very severe suffering’).

Appendix 5 summarises this information by species. The figures indicate that 85% of animals experienced no or little suffering (24.4% of animals experienced ‘no suffering’, 60.9% experienced ‘little suffering’, 9.8% experienced ‘moderate suffering’, 1.3% experienced ‘severe suffering’ and 3.6% experienced ‘very severe suffering’). The number of animals in the ‘severe’ and ‘very severe’ suffering categories combined (4.9%) is slightly lower than the last two years (6% in 2002 and 5.4% in 2001) and significantly lower than in the previous two years (14.7% in 2000 and 10.6% in 1999).
The vast majority of animals in the 'very severe suffering' category were mice and most of the rest were guinea pigs. In addition, there was one sheep and five ferrets.

The rodents in the ‘very severe suffering’ category were used for two purposes. One group is used for public health testing, mainly for marine biotoxins. Marine biotoxins arise from algal blooms in New Zealand coastal waters. Their incidence is erratic but appears to be increasing. The biotoxins are absorbed by shellfish and can cause acute illness and even death in shellfish consumers. Testing on mice ensures that shellfish are safe for New Zealand and overseas consumers to eat. Since the testing regime was introduced in the early 1990s, the number of mice needed for testing has been significantly reduced and other non-animal based methods for testing are currently under development. Of the four main toxin groups that are tested for in New Zealand, two toxin groups are now covered by non-bioassay based methods. There are non-bioassay test methods which have been developed and validated for the remaining two toxin groups and laboratory applications to use these methods are currently being assessed by the New Zealand Food Safety Authority. It is likely in the next 12 months these will be approved, however cross-checking of the non-bioassay and bioassay methods will likely be required for some time to ensure that the non-bioassay methods are robust and address the toxins of concern. This will lessen the overall number of mice used for marine biotoxin testing significantly in the next one to two years. One of the key issues that is difficult to address is ensuring that new test methods address all the toxins of public health concern that the bioassay addresses – this can be extremely difficult where toxin structures have not yet been elucidated.

In the other type of public health testing, a small number of rodents were used in the development of a botulinum screen assay, again for seafood testing.

The second group is used to test the safety and efficacy of animal health products to meet regulatory requirements both nationally and internationally. Such testing prevents suffering and death in millions of other animals, both livestock and companion animals.

8.9 NAEAC Comment

In considering the annual animal use statistics, it is important to emphasise that every manipulation having a high negative animal welfare impact must be supported by a strong cost benefit justification. The justification is individually assessed and approved by the appropriate institutional animal ethics committee (all of which contain three external members) before the work may proceed. The final approval of a research proposal is often the result of a significant iterative process and every animal ethics committee benefits from the input and perspective of the three external independent members. N A E A C, as such, plays no role in the decision making process.

NAEAC will continue to promote the concepts of humane science and the Three Rs and to actively pursue specific initiatives that contribute to those strategic goals. These include:

- maintaining contacts with ‘Alternatives Centres’ in Europe and North America;
- actively participating in the triennial international Congress on Alternatives and the Use of Animals in the Life Sciences;
- drawing attention to state of the art articles on alternatives and the Three Rs in NAEAC News;
- sponsoring conferences on humane science;
- sponsoring workshops on pain control and its amelioration;
- encouraging regulatory acceptance of alternative non-animal tests where and when applicable;
- encouraging the use of non-animal teaching programmes;
- distributing copies of RDS News to all animal ethics committees;
- secondment of New Zealand personnel to the Home Office to gain experience in the United Kingdom animal research regulatory system.
Although the New Zealand animal use statistics collection system is recognised as one of the most comprehensive in the world, NAEAC will continue to pursue refinements and improvements.

In NAEAC's experience, in all projects associated with moderate, severe or very severe suffering, all possible steps are taken to reduce or ameliorate the negative animal welfare impact. Those steps include a high level of veterinary care where practical, pre- and post-operative pain relief where appropriate and removal from the study or euthanasia immediately the research objective is achieved.

8.10 The Three Rs

In addition to those reported in previous annual reports, New Zealand examples of the successful implementation of the principles of replacement, reduction and refinement of the use of live animals in research, testing and teaching that have come to NAEAC’s attention over the past 12 months include:

• A 70% reduction in animals used for teaching purposes over a 14 year period at the Waikato Institute of Technology, despite an increase in student numbers. This has been brought about by reductions in the number of animal-based laboratory sessions incorporated in various courses after careful consideration of need plus, in the case of amphibia and dogfish, difficulties in sourcing these animals.

• Waikato Institute of Technology also reports as an example of refinement the use of conscious rabbits for blood pressure laboratories where, in the past, anaesthetised rabbits would have been used.

• Auckland University of Technology has also reported a reduction in the number of animals used for teaching in its veterinary nursing course after the purchase of sophisticated models for teaching anatomy. Other animals used spend most of the year living in family homes and are brought into class on the days they are needed for teaching and return home afterwards.

• An example of replacement is seen in the development by Dexcel of a Whole Farm Model computer simulation model for researching dairying systems. Traditional dairying systems research has required significant and expensive resource use of land, facilities and cows. Furthermore the trials must be continued for several years to establish results which are not confounded by variables such climate differences from year to year. The model has been developed with funding from the Foundation for Research, Science and Technology and Dairy Insight, from an extensive database of inputs and outputs measured in previous farm systems studies. The model is now being used to research "what-if" scenarios which would previously have only been investigated by farm systems trials. Furthermore, the range and variety of scenarios that are being tested in this way far exceeds what could have been achieved by traditional animal-based research methods.
9 Strategic Plan

The committee reviewed its strategic plan in 1995, 1998 and 2002. Operational plans are developed each year based on the strategic plan.
APPENDIX 1

Organisations with an Approved Code of Ethical Conduct or with Notified Arrangements to Use an Approved Code (As at 31 December 2003)

*Use another organisation's animal ethics committee

*Abacus Biotech Ltd
P O Box 5585
DUNEDIN

AgResearch Ltd (4 AECs)
Ruakura Agricultural Centre
Private Bag 3123
HAMILTON

*AgriQuality NZ Ltd
P O Box 182
WANGANUI

*AgVax Developments Ltd
P O Box 40822
UPPER HUTT

AGVET Consultants Ltd
702/9 Hopetoun Street
AUCKLAND 1001

Ambreed New Zealand Ltd
P O Box 176
HAMILTON

Ancare New Zealand Ltd
P O Box 36240
Northcote
NORTH SHORE CITY

*Ancrum Consultancies
18 Vanderbilt Place
Halswell
CHRISTCHURCH

*Animal Health Centre
P O Box 21
MORRINSVILLE

Animal Health Services Centre
Massey University
Private Bag 11222
PALMERSTON NORTH

*Auckland University of Technology
Private Bag 92006
AUCKLAND 1020

Auckland Zoological Park
Private Bag
Grey Lynn
AUCKLAND 1

Bay of Plenty Polytechnic
Private Bag 12001
TAURANGA

*Bayer NZ Ltd
P O Box 2825
AUCKLAND

*Bishop Viard College
P O Box 50075
PORIRUA

Bomac Laboratories Ltd
P O Box 76-369
MANUKAU CITY

*Caledonian Holdings Ltd
PO Box 82
Takanini
SOUTH AUCKLAND

*Canesis Network Ltd
Private Bag 4749
CHRISTCHURCH

*Captec (NZ) Ltd
P O Box 75340
Manurewa
MANUKAU CITY

*Central Southland Veterinary Services Ltd
P O Box 12
WINTON

Christchurch Polytechnic Institute of Technology
P O Box 540
CHRISTCHURCH

*Cook, Trevor George
Manawatu Veterinary Services
43 Manchester Street
FEILDING

*Dexcel Ltd
Private Bag 3123
HAMILTON

Diatranz Ltd
P O Box 23566
Hunters Corner
AUCKLAND
*Duirs NZ Ltd
P O Box 959
HAMILTON

Ethical Agents Ltd
P O Box 97110
South Auckland Mail Centre
AUCKLAND

Falkirk Scientific
Foundation Ltd
Mairoa Road
PIOPIO

*Feral R & D Ltd
PO Box 38443
Howick
AUCKLAND

*Fort Dodge NZ Ltd
Private Bag 92903
AUCKLAND

Genesis Research & Development
Corporation Ltd
P O Box 50
Parnell
AUCKLAND

*Hillcrest High School
P O Box 11020
HAMILTON

*Horticulture & Food Research
Institute of NZ Ltd
Private Bag 92169
AUCKLAND

HyClone New Zealand Ltd
P O Box 658
TAURANGA

*ICPbio Ltd
P O Box 1607
AUCKLAND 1

*ImmunoEthical Associates (NZ) Ltd
Crofton Park
4 Marshs Road
CHRISTCHURCH

*Institute of Environmental Science & Research Ltd
Private Bag 92021
AUCKLAND

*InterAg (DEC International NZ Ltd)
Private Bag 3123
HAMILTON

*Intervet Ltd
P O Box 4079
AUCKLAND

*Invitrogen NZ Ltd
P O Box 12502
Penrose
AUCKLAND 1135

*Karori Reservoir Wildlife Trust Inc
P O Box 9267
WELLINGTON

*Kiwi Ingenuity Ltd
PO Box 39373
Howick
AUCKLAND

*Kotare Bioethics Ltd
P O Box 2484
Stortford Lodge
HASTINGS

*Livestock Improvement Corporation Ltd
Private Bag 3016
HAMILTON

*Malaghan Institute of Medical Research
P O Box 7060
WELLINGTON SOUTH

Manawatu Polytechnic (UCOL)
Private Bag 11022
PALMERSTON NORTH

Massey University
Private Bag 11222
PALMERSTON NORTH

*Merial NZ Ltd
P O Box 76211
MANUKAU CITY

*Ministry of Agriculture & Forestry National Centre for Disease Investigation
P O Box 40742
UPPER HUTT

National Institute of Water & Atmospheric Research Ltd
P O Box 8602
Riccarton
CHRISTCHURCH
<table>
<thead>
<tr>
<th>Organization</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nelson Marlborough Institute of Technology</td>
<td>Private Bag 19</td>
</tr>
<tr>
<td></td>
<td>NELSON</td>
</tr>
<tr>
<td>*Neuronz Ltd</td>
<td>PO Box 9923</td>
</tr>
<tr>
<td></td>
<td>Newmarket</td>
</tr>
<tr>
<td></td>
<td>AUCKLAND</td>
</tr>
<tr>
<td>New Zealand Forest Research Institute</td>
<td>P O Box 3020</td>
</tr>
<tr>
<td></td>
<td>Rotorua</td>
</tr>
<tr>
<td>*New Zealand Institute for Crop &amp; Food Research Ltd</td>
<td>Private Bag 11600</td>
</tr>
<tr>
<td></td>
<td>Palmerston North</td>
</tr>
<tr>
<td>*New Zealand Institute of Advanced Laparoscopic Surgery</td>
<td>P O Box 3932</td>
</tr>
<tr>
<td></td>
<td>Christchurch</td>
</tr>
<tr>
<td>*New Zealand Leather and Shoe Research Association (Inc)</td>
<td>Private Bag 11333</td>
</tr>
<tr>
<td></td>
<td>Palmerston North</td>
</tr>
<tr>
<td>*Newall, Michael Douglas Veterinary Associates Hastings Ltd</td>
<td>814 Francis Hicks Avenue</td>
</tr>
<tr>
<td></td>
<td>Hastings</td>
</tr>
<tr>
<td>*Novartis NZ Ltd</td>
<td>Private Bag 19980</td>
</tr>
<tr>
<td></td>
<td>Avondale</td>
</tr>
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<td>Auckland</td>
</tr>
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<td>*Nufarm Ltd</td>
<td>P O Box 75340</td>
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<tr>
<td>*Parnell Laboratories NZ Ltd</td>
<td>P O Box 58502</td>
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<td></td>
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<td>*PPL Therapeutics (NZ) Ltd</td>
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APPENDIX 2

Codes of Ethical Conduct Revoked and Notified Arrangements Terminated
(As at 31 December 2003)

• Agri-Feeds Ltd
• Agrimm Biologicals Ltd
• Agriculture NZ Ltd
• Alexander and Associates
• Animal Control Products Ltd
• Animal Health Advisory
• Animalz Napier Ltd
• Aoraki Polytechnic
• Arthur Webster (New Zealand) Pty Ltd
• Aspiring Animal Services Ltd
• Auckland Area Health Board (formerly Auckland Hospital Board)
• Autogenous Vaccines
• Baker, Allan J
• Bioscience Corporation Ltd
• Biotechnology Division, DSIR
• Central Institute of Technology
• Cooks Laboratories
• Coopers Animal Health New Zealand Ltd
• Crown Research Institutes Palmerston North Campus
• Crusader Meats NZ Ltd
• Department of Education
• Diverse Animal Holdings
• Ecology Division, DSIR
• Elanco Animal Health
• Get Real Productions
• Grasslands Division, DSIR
• Green Lane & National Women’s Hospitals
• Health Waikato
• Impian Technologies Ltd
• Info-Brok
• Kristin School
• Longburn Adventist College
• Lowe Walker Hawera Ltd
• McGuire, Paul (Calf Collection Services)
• Meat Industry Research Institute of New Zealand
• Medlab Hamilton
• Ministry of Forestry
• Mulvaney, Christopher John
• National College of Security Personnel and Technology
• Nelson Hospital
• New Zealand Aluminium Smelters Ltd
• New Zealand Sheepac Ltd
• New Zealand Trade and Enterprise (formerly Industry New Zealand)
• New Zealand Water Management Ltd
• New Zealand Wildlife Rehabilitation Trust
• Orana Park Wildlife Trust
• P A Biologicals NZ
• Palmerston North Campus, DSIR
• Palmerston North Hospital Board (later known as Manawatu-Wanganui Area Health Board)
• Parkway College
• Paxarms
• Pfizer Laboratories Ltd
• Queen Margaret College
• Rhône-Poulenc (NZ) Ltd
• Roche Products NZ Ltd
• Saint Mary’s College
• Salmond Smith Biolab Ltd
• Scots College
• Shell Chemicals New Zealand Ltd
• Slacek, Brigitte
• Smith, Catherine H
• Smith Kline Beecham (New Zealand) Ltd (formerly Smith Kline & French NZ Ltd)
• South Auckland Health
• South Greta Farms Ltd
• Sovereign Feeds Ltd
• Tauhara Furs Partnership
• The New Zealand King Salmon Company Ltd
• Travenol Laboratories (New Zealand) Ltd (later known as Baxter Healthcare Ltd)
• Van Wijk, Niek
• Veterinary Enterprises Ltd
• Ward, Christopher G
• WatPa Enterprises Ltd
• Wellington High School and Community Institute
• Wellington Polytechnic
• Wrightson Breeding Services Ltd
• Young’s Animal Health (NZ) Ltd
APPENDIX 3

Publications

Guides to the Animal Welfare Act 1999

- Guide to the Animal Welfare Act 1999, policy information paper no. 27

Both documents are available from:

The Manager
MAF Information Bureau
P O Box 2526
Wellington
New Zealand

The documents are also available on MAF’s website at http://www.maf.govt.nz

Annual Reports

- 1994 Annual Report
- 1995 Annual Report
- 1996 Annual Report
- 1997 Annual Report
- 1998 Annual Report
- 1999 Annual Report
- 2000 Annual Report
- 2001 Annual Report
- 2002 Annual Report

Newsletters (NAEAC News)

- Issue 1 – August 1991
- Issue 2 – May 1992
- Issue 3 – August 1993
- Issue 4 – October 1994
- Issue 5 – March 1995
- Issue 6 – December 1995
- Issue 7 – May 1996
- Issue 8 – October 1996
- Issue 9 – April 1997
- Issue 10 – November 1997
- Issue 11 – June 1998
- Issue 12 – December 1998
- Issue 13 – July 1999
- Issue 14 – March 2000
- Issue 15 – September 2000
- Issue 16 – March 2001
- Issue 17 – January 2002
- Issue 18 – July 2002
- Issue 19 – May 2003
- Issue 20 – December 2003
NAEAC Guides

- Guide on Codes of Ethical Conduct (May 2002)
- Good Practice Guide for the Use of Animals in Research, Testing and Teaching (September 2002)

These publications are available on the Internet at the following addresses:

or by contacting:
Animal Welfare Group,
MAF Biosecurity Authority
PO Box 2526,
Wellington,
New Zealand

Phone 04 474 4129
Fax 04 498 9888,
Email: animalwelfare@maf.govt.nz
APPENDIX 4

Accredited Reviewers

REVIEWERS ACCREDITED PURSUANT TO SECTION 109 OF THE ANIMAL WELFARE ACT 1999

Dr Howard V BROOKS
AgriQuality NZ Ltd
PO Box 585
PALMERSTON NORTH
Phone: 06-3517935
Fax: 06-3517919
Email: brooksh@agriquality.com

Dr Norman R BURTON
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Shropshire SY3 7WN
UNITED KINGDOM
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Fax: 0044-1743344691
Email: norman.burton@homeoffice.gsi.gov.uk

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Khandallah
WELLINGTON
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Fax:
Email: patcandvalc@xtra.co.nz

Dr A B (Nita) HARDING
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Fax: 07-8385846
Email: hardingn@agriquality.com

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INVERCARGILL
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Fax:
Email: phartley@xtra.co.nz

Dr David R MORGAN
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LINCOLN
Phone: 03-3256700
Fax: 03-3256705
Email: morganlandcareresearch.co.nz

Dr Keith D PATERSON
AgriQuality NZ Ltd
PO Box 951
ROTORUA
Phone: 07-3458720
Fax: 07-3458729
Email: patersonk@agriquality.com

Dr Virginia M WILLIAMS
15 Tongariro Street
Mt Eden
AUCKLAND
Phone: 09-6301197
Fax: 09-6301197
Email: vwilliams@xtra.co.nz

Dr Burton wishes to undertake reviews for professional development reasons.
He will pay for his own travel to New Zealand.
APPENDIX 5

Definitions from the Animal Welfare Act 1999

EXCERPT FROM SECTION 2(1)

“Animal” –

(a) Means any live member of the animal kingdom that is –
   (i) A mammal; or
   (ii) A bird; or
   (iii) A reptile; or
   (iv) An amphibian; or
   (v) A fish (bony or cartilaginous); or
   (vi) Any octopus, squid, crab, lobster, or crayfish (including freshwater crayfish); or
   (vii) Any other member of the animal kingdom which is declared from time to time by the Governor-General, by Order in Council, to be an animal for the purposes of this Act; and
(b) Includes any mammalian foetus, or any avian or reptilian pre-hatched young, that is in the last half of its period of gestation or development; and
(c) Includes any marsupial pouch young; but
(d) Does not include –
   (i) A human being; or
   (ii) Except as provided in paragraph (b) or paragraph (c) of this definition, any animal in the pre-natal, pre-hatched, larval, or other such developmental stage:

3 DEFINITION OF “MANIPULATION”

(1) In this Act, unless the context otherwise requires, the term "manipulation", in relation to an animal, means, subject to subsections (2) and (3), interfering with the normal physiological, behavioural, or anatomical integrity of the animal by deliberately –
   (a) Subjecting it to a procedure which is unusual or abnormal when compared with that to which animals of that type would be subjected under normal management or practice and which involves –
      (i) Exposing the animal to any parasite, micro-organism, drug, chemical, biological product, radiation, electrical stimulation, or environmental condition; or
      (ii) Enforced activity, restraint, nutrition, or surgical intervention; or
   (b) Depriving the animal of usual care; –
   and "manipulating" has a corresponding meaning.
   (2) The term defined by subsection (1) does not include –
   (a) Any therapy or prophylaxis necessary or desirable for the welfare of an animal; or
   (b) The killing of an animal by the owner or person in charge as the end point of research, testing or teaching if the animal is killed in such a manner that the animal does not suffer unreasonable or unnecessary pain or distress; or
   (c) The killing of an animal in order to undertake research, testing, or teaching on the dead animal or on prenatal or developmental tissue of the animal if the animal is killed in such a manner that the animal does not suffer unreasonable or unnecessary pain or distress; or
   (d) The hunting or killing of any animal in a wild state by a method that is not an experimental method; or
   (e) Any procedure that the Minister declares, under subsection (3), not to be a manipulation for the purposes of this Act.
   (3) The Minister may from time to time, after consultation with the National Animal Welfare Advisory Committee and the National Animal Ethics Advisory Committee, declare any procedure, by notice in the Gazette, not to be a manipulation for the purposes of this Act.
(4) The Minister must, in deciding whether to publish a notice under subsection (3) in relation to procedure, have regard to the following matters:

(a) The nature of the procedure; and
(b) The effect that the performance of the procedure will or may have on an animal's welfare; and
(c) The purpose of the procedure; and
(d) The extent (if any) to which the procedure is established in New Zealand in relation to the production of animals or commercial products; and
(e) The likelihood of managing the procedure adequately by the use of codes of welfare or other instruments under this Act or any other Act; and
(f) The consultation conducted under subsection (3); and
(g) Any other matter considered relevant by the Minister.

5 DEFINITION OF "RESEARCH, TESTING, AND TEACHING"

(1) In this Act, unless the context otherwise requires, the term "research, testing, and teaching" means, subject to subsections (2) to (4), –

(a) Any work (being investigative work or experimental work or diagnostic work or toxicity testing work or potency testing work) that involves the manipulation of any animal; or

(b) Any work that –
   (i) Is carried out for the purpose of producing antisera or other biological products; and
   (ii) Involves the manipulation of any animal; or

(c) Any teaching that involves the manipulation of any animal.

(2) The term defined by subsection (1) does not include any manipulation that is carried out on any animal that is in the immediate care of a veterinarian, if –

(a) The veterinarian believes on reasonable grounds that the manipulation will not cause the animal unreasonable or unnecessary pain or distress, or lasting harm; and

(b) The manipulation is –
   (i) For clinical purposes in order to diagnose any disease in the animal or any associated animal; or
   (ii) For clinical purposes in order to assess the effectiveness of a proposed treatment regime for the animal or any associated animal; or
   (iii) For the purposes of assessing the characteristics of the animal with a view to maximising the productivity of the animal or any associated animal.

(3) The term defined by subsection (1) does not include any manipulation of an animal –

(a) Which is carried out with the principal objective of-
   (i) Assisting the breeding, marking, capturing, translocation, or trapping of animals of that type; or
   (ii) Weighing or taking measurements from the animal; or
   (iii) Assessing the characteristics of animals of that type; and

(b) Which is a manipulation of an animal that –
   (i) Is carried out routinely; or
   (ii) Is a minor modification of a manipulation that is carried out routinely; and

(c) Which is used to fulfill responsibilities and functions under –
   (i) The Conservation Act 1987; or
   (ii) Any Act listed in the First Schedule of the Conservation Act 1987; or
   (iii) Any other Act or regulations under which the Minister of Conservation or the Director-General of Conservation or the Department of Conservation has responsibilities or functions; or
(4) For the purposes of this section, an animal is in the immediate care of a veterinarian if the veterinarian —
   (a) Has accepted responsibility for the health and welfare of the animal; and
   (b) Is providing the animal with direct and continuing care.

(5) In the other sections of this Act (except section 57(a)(i)), —
   (a) The term "research" means any research work that comes within the term defined by subsection (1); and
   (b) The term "testing" means any testing work that comes within the term defined by subsection (1); and
   (c) The term "teaching" means any teaching that comes within the term defined by subsection (1).
## Animal Usage Report: Summary by Species

### Reporting Period

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Animal Usage Report: Summary by Organisation Type

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## APPENDIX 8

Animal Usage Report: Summary According to Severity Scale

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