



Meat Industry Association of New Zealand (Inc)

Submission to the
Ministry of Agriculture and Forestry
on

Proposed Animal Welfare Projects
for
Operational Research Funding

February 2007

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I: Introduction

1. The Meat Industry Association of New Zealand Incorporated (MIA) is a voluntary trade association representing New Zealand meat processors, marketers and exporters. It is an Incorporated Society (owned by members) that represents companies supplying the majority of New Zealand sheepmeat exports and all beef exports, producing 16 per cent of our nation's exports by value (27 percent of New Zealand's primary sector export revenue). The New Zealand meat industry earned \$5 billion in export revenue in the year ended May 2006 and \$1.22 billion from domestic meat sales in the year ended March 2006.
2. MIA member companies operate approximately 80 processing plants dispersed throughout the country. The plants slaughter and process approximately 24 million lambs, 4.4 million sheep and 4.2 million cattle and calves each year. Ninety percent of this production is processed into value-added products. Approximately 800,000 tonnes or 85% of the production is exported to overseas destinations. Our affiliate members add to the depth of expertise available from the membership, with representation throughout the meat supply chain, including road and rail transport, shipping lines, ports, packaging firms, specialist product exporters, research and technology.
3. The Association advocates on behalf of its members and provides advice on economic, trade policy, market access, employment relations, business compliance costs and technical and regulatory issues facing the industry, with a particular focus on:
 - Food safety trends and developments in importing countries
 - Economic and trade aspects of market access to key overseas markets
 - Major public policy proposals that could impact on industry operations
4. The MIA is also the interface between the meat industry and government (i.e., it is the consultative body referred to in various New Zealand statutes, such as the Meat Board Act 2004 and the Animal Products Act 1999).
5. The Association's mission is to:
 - Provide a forum for consideration of industry-wide commercial, human resource, marketing, and sanitary and zoosanitary issues; and
 - Provide the means of formulating a collective view on issues of industry-wide interest, and of conveying that position to government, departments of state, trade bodies, and other appropriate external agencies and organisations.
6. A list of Association members is attached as Appendix 1.

II: Executive Summary

7. The Ministry of Agriculture and Forestry (MAF) has requested ideas for possible operational research projects relating to animal welfare.
8. The Meat Industry Association has consulted with its members and submits the following seven projects, which are listed in priority order.

III: Background

9. This submission is made by the MIA in response to the request received from the MAF Technical Adviser Animal Welfare, on the 18 December 2006, for animal welfare research topics that could be funded by the MAF operational research fund.
10. The MIA supports the need for investment in research and development to ensure a robust regulatory framework for the welfare of animals based on science.
11. In preparing this submission all members were consulted and asked for input. MIA members may also make individual submissions relating to priorities within their specific operations.

V: Proposed Projects

1. Scientific Standards from Stunning to Bleeding Out in Large Animals

12. Information Gap

The November 2006 draft of the NAWAC Commercial Slaughter Code of Welfare requires that the primary carotid artery stick and the secondary procedure must be completed within 40 seconds of stunning for adult cattle, and within 30 (previously 35) seconds for bobby calves and vealers. (Minimum standard 11(e).)

There is a need to establish appropriate scientific data based on current processing practices to determine and establish appropriate standards from stunning to bleeding out in large mammals

13. Links to other Research

The bulk of the scientific work confirming this is now over 10 years old and does not relate to current practices occurring in premises (e.g., the use of electrical stunning in conjunction with immobilization).

14. Benefits to Animal Welfare

The development of scientific based standards would provide the necessary confidence to processors and markets (e.g. EU) that animal welfare requirements will be met during ritual slaughter, thus preserving New Zealand's ability to trade in these traditional markets.

15. Anticipated Outputs

Standards developed and incorporated into the NAWAC Commercial Slaughter Code of Welfare, when determined.

16. Indicative Costs and Resources

Unknown

2. Objective Criteria for Determining Impact of Processes on Animal Welfare

17. Information Gap

Physical, health and behavioural needs are defined in section 4 of the Animal Welfare Act, by reference to what is referred to internationally as the 'five freedoms'. These are:

- Proper and sufficient food and water;
- adequate shelter;
- the opportunity to display normal patterns of behaviour;
- appropriate physical handling; and
- protection from, and rapid diagnosis of, injury and disease.

The Act does not expand on these obligations but detailed minimum standards of care are found in codes of welfare. Currently there is no clear and consistent animal welfare measures against which to assess current, improved or new processes. Examples of such processes requiring an assessment are swim washing, transport and standing stock.

18. *Links to other Research*

Many animal welfare research projects require objective measurements and criteria to assess their success and/or acceptability. Hence the output from this project is an important tool for use in many animal welfare projects.

19. *Benefits to Animal Welfare*

Animal welfare would benefit by having objective criteria.

20. *Anticipated Outputs*

Criteria that can be used to measure the impact on animal welfare on new and changing processes.

21. *Indicative Costs and Resources*

Unknown

3. Scientific Modeling for Stock Crate Design

22. *Information Gap*

Stock crate design has a high impact on animal welfare, which in turn has a high impact on product quality (e.g., pH, shelf life). In designing stock crates there are a number of parameters that need to be considered to ensure the welfare of the stock. These include ventilation, roofing, loading densities, animal size, head height, temperature, time / length of travel, etc. Each of these, on their own or in combination, can have different levels of impact. While there are a number of studies on these parameters, there is a need to gather this information and identify/research any gaps to develop a scientific model for New Zealand conditions.

23. *Links to other Research*

Australia and the EU have specific transport legislation which may be based on stock crate design research. This needs to be searched and utilized as appropriate.

24. *Benefits to Animal Welfare*

Stock crates designed with animal welfare needs taken into consideration would allow stock to be transported with fewer injuries and reduced stress. In addition with the advent of stock being transported longer distances, the development of scientifically designed crates would benefit the welfare of the animals.

25. *Anticipated Outputs*

A model to assist in the designing of new stock crates for the optimization of animal welfare.

26. *Indicative Costs and Resources*

Unknown

4. Alternative Livestock Washing Methods

27. *Information Gap*

Washing can be a major stressor in the period prior to slaughter. A number of improved methods for washing are being developed using technology and detergents to improve efficacy and reduce the

need for swim washing. The development of improved techniques and the assessment of these techniques on animal stress pre-slaughter, under New Zealand conditions are required.

28. *Links to other Research*

This project could link with the project for determining objective animal welfare criteria (but commencement should not be dependant on the objective criteria project proceeding).

29. *Benefits to Animal Welfare*

Reduction of stress prior to slaughter.

30. *Anticipated Outputs*

Alternative stock washing methods with scientific evidence to show the impact on stress pre-slaughter.

31. *Indicative Costs and Resources*

Unknown

5. **Develop / Update Science for NZ Conditions**

32. *Information Gap*

Retailers, fast food chains and supermarket chains, (often through audit companies, such as Integra) undertake animal welfare audits on New Zealand meat processors and farms. Many of the requirements are based on overseas farming practices rather than the acceptance of New Zealand animal welfare principles and it is becoming more difficult to defend the NZ practices due to new requirements and dated (NZ) science. Therefore there is a need to develop or update the scientific evidence used by industry to substantiate the animal welfare requirements that are required by customers under NZ conditions. Such examples are:

- The provision of bedding straw in trucks and pens,
- The vocalization test (and criteria),
- The roofing of crates, and
- Animals to be fed after 12 hours.

33. *Links to other Research*

This project could link with the project for determining objective animal welfare criteria (but commencement should not be dependant on the objective criteria project proceeding).

34. *Benefits to Animal Welfare*

Scientific evidence to support NZ practices.

35. *Anticipated Outputs*

Updated scientific / technical papers that support the farming/transport/processing practices of NZ.

36. *Indicative Costs and Resources*

Unknown

6. **Impact on Standing Stock prior to Transportation**

37. *Information Gap*

Farmers are urged to stand stock off feed for 4-8 hours prior to transport to minimize the amount of stock effluent that spills on roads from stock trucks. The impact of this action on the welfare of the

animal needs to be scientifically determined to provide evidence to farmers that there is no negative animal welfare implications of standing stock.

38. *Links to other Research*

This project could link with the project for determining objective animal welfare criteria (but commencement should not be dependant on the objective criteria project proceeding).

39. *Benefits to Animal Welfare*

The optimum times from an animal welfare perspective, for standing stock off feed (prior to transport and slaughter) will be able to be scientifically established.

40. *Anticipated Outputs*

As above

41. *Indicative Costs and Resources*

Unknown

7. **Establishing Cause of Downer Cows**

42. *Information Gap*

A problem has been identified with lactating cows being sent to slaughter by dairy farmers that are either down on the truck upon arrival or go down soon after unloading.

The cows have usually been milked in the morning and put into the cattle yards until they are picked up by the transport company for delivery to the plant. In most cases the time spent from milking to delivery is not considerable and cows are usually at the plant before noon. The cows that do go down are not always the light condition cows as one might expect but are in a lot of cases cows carrying medium to good condition. The cause of this phenomenon is unknown and needs to be established to enable corrective action to be taken to improve the welfare of the cow and thus prevent them from becoming downers.

43. *Links to other Research*

Unknown

44. *Benefits to Animal Welfare*

The prevention of the cows going down will minimize the stress on the cows and the chance of injury.

45. *Anticipated Outputs*

Determining the cause of these cows going down, is necessary to educate and help Dairy Farmers understand the requirements of handling cattle prior to delivery and prevent any metabolic disorder that may occur.

46. *Indicative Costs and Resources*

Unknown

VI: **Contact Details**

47. If further information is required on any of these projects, please contact either Rowan Ogg (rowan.ogg@mia.co.nz) or Kevin Cresswell (Kevin.cresswell@mia.co.nz).

Appendix: List of MIA Members and Affiliate Members (year commencing 1 July 2006)

Members
Advance Marketing Ltd
AFFCO New Zealand Ltd
Alliance Group Ltd
ANZCO Foods Ltd
ANZCO Green Island Ltd (ANZCO group)
ANZPAC Foods Ltd
APJ Meats Ltd
Auckland Meat Processors Ltd
Ballande New Zealand Ltd
Bernard Matthews New Zealand Ltd
Blue Sky Meats (NZ) Ltd
<i>Brookland (NZ) Ltd (in receivership)</i>
Canterbury Meat Packers Ltd (ANZCO group)
CMP Rakaia
Columbia Exports Ltd
Crown Marketing Ltd (ANZCO group)
Crusader Meats New Zealand Ltd
Dairy Meats NZ Ltd (AFFCO group)
Davmet New Zealand Ltd
Fern Ridge Ltd
Frasertown Meat Company Ltd
Garra International Ltd
Glovers Foods Ltd
Greenlea Premier Meats Ltd
Harrier Exports Ltd
Horizon Meats New Zealand Ltd (wholly owned subsidiary of Blue Sky Meats (NZ) Ltd)
Hygrade Casings Company (wholly owned subsidiary of New Zealand By-Products)
Lamb Packers Feilding Ltd (wholly owned subsidiary of Bernard Matthews NZ Ltd)
Land Meat (NZ) Ltd (AFFCO group)
Lanexco Ltd
Lowe Corporation Ltd
Malvern Meat Processors Ltd (AFFCO group)
Mathias International (Mathias Meats NZ Ltd)
New Zealand By-Products
Pilot (NZ) Ltd
PPCS Ltd
Progressive Gisborne Ltd (wholly owned subsidiary of Bernard Matthews NZ Ltd)
Progressive Meats Ltd
Riverlands Ltd (ANZCO group)
South Pacific Meats Ltd
Tara Exports Ltd
Taylor Preston Ltd
Te Kuiti Meat Processors Ltd
Towers Thompson (New Zealand) Ltd
Universal Beef Packers Ltd (UBP)
Wallace Corporation Ltd

Affiliate Members
AgResearch-MIRINZ Centre
Aon New Zealand Limited
Axis Intermodal (Ports of Auckland Ltd)
Carter Holt Harvey, Packaging
CentrePort Wellington
Energy for Industry (ex Meridian Solutions)
Hamburg-Sud New Zealand Ltd
Hapag Lloyd (New Zealand) Ltd
Maersk New Zealand Ltd
Oceanic Navigation Ltd
Port of Napier
Port Otago Ltd
Port Taranaki Ltd (previously Westgate Transport Ltd)
ProAnd Ltd (Meatek Ltd)
Rissington Breedline Ltd
Sealed Air (New Zealand), Cryovac Division
Thompson Clarke Shipping Pty Ltd (ANZ Marketing Representative for the Port of Los Angeles)
Vero Marine Insurance