Calf management across the supply chain
Introduction

The Australian dairy industry is a leader in the care of its animals and strives to maintain community trust and confidence, as well as facilitating market access.

A key priority for the National Dairy Industry Animal Welfare Strategy is to ensure that all calves are managed across the supply chain according to agreed industry practices and standards.

This Report summarises significant achievements in addressing two principal issues of critical importance to the dairy industry and the wider community. They are:

Everybody understands the calf supply chain commitment to responsible handling and care of calves

The calf supply chain maintains an excellent reputation for production of veal that meets required food industry standards.
Objectives

Considerable effort and investment have been expended by the dairy industry on these two issues, with major improvements clearly achieved.

The dairy industry's Calf Management Program has been developed to address the health and welfare of all dairy calves and involves all stakeholders, including farm workers, transporters, saleyard operators and meat processors, to achieve practice change.

Its objectives are:

1. All people working across the calf supply chain must deliver on their responsibilities for good calf health and welfare

2. Government and the public can expect high standards from the calf supply chain and have confidence that it is operating responsibly

3. Confirmation that recommended practices are supported by robust science and deliver against community expectations using appropriate industry tools and systems to confirm this
Calf Management Program Outcomes

The Calf Management Program has been developed to deliver significantly improved outcomes along the calf supply chain in terms of animal welfare, industry confidence and enhanced reputation.

In summary, the outcomes include:

- Monitoring that demonstrates dairy farmers are implementing high quality calf husbandry and management systems, in line with industry-agreed practices and standards.
- Practices and standards for calf management that deliver against community expectations and are underpinned by contemporary science and research.
- The whole dairy calf supply chain working together to meet animal welfare and food safety objectives.
- Management systems that can withstand pressures during peak calving periods and provide meat processors and regulators with confidence that the dairy management system delivers calves that do not pose risks to the meat industry.
- A national, common understanding of, and commitment to, what delivers good calf management.
To help achieve this objective, a number of different activities were co-ordinated to address every link in the supply chain.

**Activities**

The industry-endorsed, *Essential Components* of Calf Management is the cornerstone on which supply chain management improvements have been built. It is designed to ensure good animal health and welfare outcomes for calves by addressing a number of factors including pre-calving, traceability, feeding, a protective environment, health management, residue management, weaning and preparation for sale or transport.

A recent independent survey indicated that 80% of dairy farmers over the past two years obtained information on animal health and welfare that they valued. Of these, 44% recalled receiving information about management of bobby calves.

A benchmark of current industry performance in addressing the *Essential Components* has been established through surveys and group discussion with farmers. The results show:

- **98% of farmers are able to prove that calves are fed within 6 hours of transport**
- **86% of farmers have a permanent identification system in place to confirm the age of calves.**

---

1. Down to Earth Animal Husbandry and Biosecurity Survey August 2010
2. Down to Earth Animal Husbandry and Biosecurity Survey August 2010
Additionally, farmers are regularly reminded of their responsibilities for calf welfare and residue management through articles in rural media.

Extensive coverage has included:

<table>
<thead>
<tr>
<th>Article</th>
<th>Publication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consider the options for non-replacement calves</td>
<td>The Australian Dairyfarmer Sept/Oct 2010</td>
</tr>
<tr>
<td>Dos and DON'Ts of calf rearing</td>
<td>The Australian Dairyfarmer, Sept/Oct 2010</td>
</tr>
<tr>
<td>Workshop updated participants on animal welfare practices</td>
<td>Maryborough Advertiser, 7 Sept 2010</td>
</tr>
<tr>
<td>Honing in on Calf Management</td>
<td>Bairnsdale Advertiser, 6 Sept 2010</td>
</tr>
<tr>
<td>Focus on Calf Skills</td>
<td>Stock &amp; Land, 2 Sept 2010</td>
</tr>
<tr>
<td>Avoiding residues is a calf management essential</td>
<td>Dairy News Australia, June 2010</td>
</tr>
<tr>
<td>Calf Management – how do you rate?</td>
<td>The Australian Dairyfarmer, May/June 2010</td>
</tr>
<tr>
<td>Calf management review</td>
<td>The Australian Dairyfarmer, May/June 2010</td>
</tr>
<tr>
<td>Newborn calves require three Qs</td>
<td>Colac Herald, May 2010</td>
</tr>
<tr>
<td>Minimising risk of antibiotic residues in dairy calves</td>
<td>The Australian Dairyfarmer, May/June 2010</td>
</tr>
<tr>
<td>Colostrum tips improve calf health</td>
<td>Dairy News Australia, May 2010</td>
</tr>
<tr>
<td>Program to maintain calf-rearing standards</td>
<td>The Australian Dairyfarmer, Sept/Oct 2009</td>
</tr>
<tr>
<td>Hygiene critical to calf-rearing success</td>
<td>The Australian Dairyfarmer, Sept/Oct 2009</td>
</tr>
<tr>
<td>Calf-rearing essentials</td>
<td>The Australian Dairyfarmer, May/June 2009</td>
</tr>
<tr>
<td>Take no chances</td>
<td>The Australian Dairyfarmer, May/June 2009</td>
</tr>
<tr>
<td>Comfortable surrounds</td>
<td>The Australian Dairyfarmer, May/June 2009</td>
</tr>
<tr>
<td>It’s all in the preparation</td>
<td>The Australian Dairyfarmer, May/June 2009</td>
</tr>
<tr>
<td>Health management cornered</td>
<td>The Australian Dairyfarmer, May/June 2009</td>
</tr>
<tr>
<td>Tackling scouring calves</td>
<td>The Australian Dairyfarmer, Nov/Dec 2008</td>
</tr>
<tr>
<td>Information Folder: Calf welfare and residues fact sheets</td>
<td>Mailout to all dairy farmers, June 2008</td>
</tr>
<tr>
<td>Information Kit: Duty of Care for Calves</td>
<td>Mailout to all dairy farmers, Mar 2008</td>
</tr>
</tbody>
</table>

This coverage was complementary to other, more direct, communications efforts undertaken as part of the industry's initiative.
Communication with farmers was further intensified by collaborating and communicating with industry service providers, including cattle vets and dairy extension staff. Publications have included:

- McNeil, J.

- McNeil, J.

- McNeil, J.

Farmers from five major dairying regions in Victoria and South Australia have attended Healthy Calf workshops that addressed good calf management. These were delivered in conjunction with the Dairy Extension Centre (DEC) and the National Centre for Dairy Education Australia (NCDEA). Material is being developed from these workshops for inclusion in ongoing formal calf management training to be offered to all dairy farmers through the NCDEA.

Of those who attended the workshops held to date:

*Between 75% and 87% of participants indicated they would change their management practices for colostrum and feeding – thus improving calf health, reducing the need for calf treatments and therefore the potential for antibiotic residues.*

*Between 53% and 74% of participants said they would change their management practices for residue management.*
In collaboration with the Meat Industry Training and Advisory Council (MINTRAC), and the NCDEA, training resources have been developed to offer formal competencies in the managing and handling of calves destined for slaughter. This is for people working with calves from farm to abattoir and includes transport and saleyard operators.

Improvements in tracking calves through the dairy industry sponsored supply chain integrity trial has enabled the dairy industry to monitor and investigate calf health and welfare performance. Feedback to dairy farmers on the residue and welfare status of calves sent to processors is also provided.

85% (344,658) of all calves sent to Trial abattoirs between 1/01/2010 and 30/09/2010 were scanned and transferred into NLIS

7.4% of scanned calves were screened for antibiotic residues with the results sent to farmers

0.4% of total tested in 2009/2010 returned positive screen results and of these, only 30% (0.13% of total) had confirmed excessive antibiotic residues
The reporting of test results in calves and follow-up investigations of residue incidents has resulted in a greater awareness among farmers, both of the importance of antibiotic residue management, and an understanding of the factors that contribute to a positive test result.

72% of farmers are aware that abattoirs test calves for residues

40% of farmers in western Vic and 43% in South Australia reported receiving notification that their calves have been tested

Feedback from farmers on the screen test reporting initiative has been very positive:

“It makes everyone more vigilant and thorough in making sure calves are fit for sale”

3 Down to Earth Calf Rearing Survey 2009
Since March 2010, 22 vet investigations, co-ordinated through Dairy Australia, have been conducted on farms that have positive results in screening tests for residues.

When comparisons are made between related testing and samples the following changes are evident:

- **Domestic NARM Spring cohort 2007-2011**
  - Decrease in violations from 0.6% to 0.33%
  - This is a **45% improvement** over 3 seasons (15% improvement per annum)

- **Domestic NARM Autumn cohort 2007-2010**
  - Decrease in violations from 0.86% to 0.23%
  - This is a **62% improvement** over 2 seasons (31% improvement per annum)

- **Export Baseline Spring cohort 2009-2011**
  - Decrease in violations from 0.35% to 0.27%
  - This is a **21% improvement** in one season.

- **Export Baseline Autumn cohort 2008-2010**
  - Decrease in violations from 0.16% to zero violations.

- **Export NARM**
  - No significant change but frequency is less than 0.1% from testing a very large sample.

1.6% of all dairy farms may have unknowingly treated calves for sale with an antibiotic in the past as a result of poor labeling. Cattle vets have been asked to provide better labels when providing antibiotics – especially for Scourban. Dairy Australia provides targeted messages to farmers about antibiotic treatments, especially scour treatments.
The dairy industry must be able at all times to demonstrate a commitment to and implementation of high standards of animal welfare at every level. Meeting this objective therefore is of fundamental importance.

**Activities**

Stakeholders are advised of continuous improvement in the industry’s calf management by benchmarking current practices and reporting findings from subsequent surveys.

- Independent (Down to Earth) Animal Husbandry Surveys undertaken in 2005, 2008 and 2010
- Independent (Down to Earth) Calf Management farmer focus groups and survey held in 2009

Regular publication in media and via industry reports that update the work being undertaken and progress achieved in calf management.

- Key stakeholders in calf management are kept informed of initiatives and achievements under the calf management program through the Australian Dairy Farmer’s (ADF) Strategic Reference Group for Calf Management.
Animal health and welfare is monitored and investigated through the electronic tracking of calves from farm to abattoir. Outcomes include:

- Less than 1 in 1000 of scanned calves were recorded as dead on arrival or dead in pens
- The tracking system allows flagging of properties sending calves not considered fit for sale (wet cords, too young, sickly) so that calf buyers are alerted to look for similar issues at the next pick up
- Software has been developed that can report on welfare measures such as time in transit and time off feed.

Critical considerations for calves under the Australian Animal Welfare Standards and Guidelines for Livestock as well as in relevant Codes of Practice include provision of adequate feed and water, suitable housing and ensuring calves are fit for sale. These considerations are reflected in dairy industry resources and communications.

- The Essential Components for the management of calves was developed with consideration of the intent of the draft Standards and Codes of Welfare for calves
- The Healthy Calves Resource Manual used in farmer workshops includes reference to national and state legislation to which farmers are expected to adhere and also provides guidelines as to how to achieve these Standards.

On-farm Quality Assurance now incorporates elements of calf management including aspects of calf health treatments and records and calf identification.

- 70% of farmers receiving animal welfare information over the past two years who were not up to date with the latest recommended practices said the information received changed their thinking about animal welfare
Confirmation that recommended practices are supported by robust science and deliver against community expectations using appropriate industry tools and systems to confirm this.

The industry must have independent endorsement that its practices are acceptable and of a high standard. Evidence-based observations provide confidence in industry practices.

Activities

Service providers, including vets and dairy extension staff, are provided with industry-endorsed resource material about good calf health and welfare practices for them to distribute to farmers.

- In order to assist farmers, vets investigating residue screening results are provided with resource materials addressing the essential components of calf management.

- People delivering workshops use the *Healthy Calf Resource Manual* which includes essential components of calf rearing and guidelines.

A Trial using electronic tags through the NLIS system has been developed and, with, support from ADF and AMIC and co-funding from DAFF and DPIV software has been developed to:

- Track calves from farm to slaughter

- Produce timely reports on the health and welfare of calves sent to slaughter. This enables industry to identify poor performance on farm as well as among buyers and transporters who attempt to sell or transport calves that are unfit for sale.
A project has been implemented to better understand how antibiotic residues occur in the context of current calf management practices.

- Since March 2010, 22 vet investigations, co-ordinated through Dairy Australia, have been conducted on farms that have positive results in screening tests for residues.
- Causes of residue incidents are identified and, through assistance from local vets, preventative measures introduced on those properties.
- Analysis is used to identify the most significant contributing factors for residue incidents to allow the industry to target high risk practices on farm through industry communications.

Industry recommendations for the Australian Animal Welfare Standards and Guidelines are based on research commissioned by Dairy Australia including:

- a review of calf physiology and suitability for transport in the first week of life
- a review of management of painful husbandry processes in calves (e.g. disbudding)
- Assessing cow and calf behavior and any stress associated with separating the calf from its dam
- science-based research to support a maximum time off feed for bobby calves being transported to slaughter.
Conclusion

This Report demonstrates the dairy industry's sustained commitment to continual improvement to achieve better outcomes in calf management.

The dairy industry monitors the whole calf supply chain to ensure the government, the community and the wider meat industry that every aspect of its calf management program maintains high animal health and welfare standards.

The dairy industry seeks commitment from all calf supply chain stakeholders for good welfare and market assurance outcomes in respect of calf management.