Australia's Declining Sheep Flock

Implications for the Sheep CRC and the Australian sheep industry

Click here to watch and listen to the Landline program from 29 August 2010 and read the related article.

The size of the Australian sheep flock has fallen from a 170 m in 1990 to below 77 m in 2008. With strong demand for lamb and high prices for mutton and sheep for the live export trade there are concerns that current levels of turnoff are not sustainable. There have also been important changes in the flock composition with an increase in the proportion of Merino ewes joined to terminal sires and a sharp decrease in numbers of Merino wethers relative to ewes. The combined effect of the declining flock size and the changing structure away from wool-producing Merinos has significantly reduced wool production.

Decreasing supply and continued strong demand has resulted in increased prices of sheep and lambs. The high prices for mature animals (ewes and wethers) provides a mixed message. On one hand it implies that it is good to keep ewes longer as it will be difficult to re-purchase at a later date. Alternatively, it provides an incentive to sell as the current prices provide a good opportunity for producers to get out of sheep. The age demographic of sheep producers means that this could be an important consideration for a number of producers nearing retirement age. Further information should be gathered on the characteristics of producers getting out of sheep to explore the hypothesis that older producers are selling sheep and moving into cattle.

In the case of wool, there has been a long period of low prices for producers initially driven by over supply and more recently the global economic crisis has led to reduced demand. Meanwhile, the rising Australian dollar has increased the price of wool to processors and consumers. For many sheep producers it appears that the lower wool price has been a further incentive to move out of Merino sheep. Most of the decrease in wool supply has been in the mid-micron wools (21-23 m) while the supply of fine and superfine wool has been relatively stable.

The changing flock size and structure are important to the Sheep CRC in terms of ensuring that our portfolio of research is appropriately focused and that our commitments made in the Commonwealth agreement are still achievable.

Three key documents provide detailed analysis of the changing flock:

- MLA 2009 mid-year forecast for the sheep meat industry;
- The DAFWA Wool Desk Report #12 (Kimbal Curtis, September 2009); and
- Report on ‘Situation, outlook and opportunities for the supply and demand of apparel wool’ (Chris Wilcox, September 2009)

Although there are some differences between projections by MLA and the DAFWA Wool Desk report it is clear that the size of the flock will only stabilize if there is a significant reduction in
the number of mature animals (particularly ewes) being slaughtered, fewer ewes sold for live export and an increase in reproductive efficiency. Kimbal Curtis has developed a model for examining various scenarios for decreased slaughter rates and increasing reproductive efficiency. Several scenarios are outlined in the Wool Desk report. The model is available for further “what if” scenario testing. To download the model click here.

Implications for CRC:

- **Reproductive efficiency.** The importance of increasing reproductive efficiency is highlighted by the analysis. The CRC’s Project 1.2 is designed to deliver increased reproductive efficiency and is making good progress. Further analysis is warranted to determine whether further resources should be allocated to this area and to identify opportunities for collaborating with other organisations to develop synergies through combined research and utilization activities.

- **Demand for wool.** The CRC’s Wool Program focuses on increasing consumer demand for light weight knitted garments worn next-to-skin. Fabrics for these garments require fine to super fine wool (< 19 m) and demand for these high quality garments is sensitive to economic conditions. It is possible that recovery from the global economic crisis and new technologies developed by the CRC will increase demand and price for wool to the point where keeping more Merino sheep for wool production will be attractive.

- **Meat quality.** With increasing sheep prices and rising meat prices product quality becomes increasingly important in order to maintain consumer demand. The CRC’s meat quality research targets both eating quality and nutritional value and is proving to be well positioned.

- **Labour.** The amount of work involved in sheep management compared to alternatives such as cattle and cropping is clearly a factor in declining sheep numbers. Competition for labour during the resources boom, immediately prior to the economic crisis, highlighted this problem. The CRC’s Projects 1.1 and 1.7 aim to produce better adapted sheep that require less labour input and automated measurement and management systems that increase labour productivity.

- **Economic impact.** The reduced flock size may make it difficult for the CRC to achieve the quantum of benefit described in the Commonwealth Agreement as initial impact analysis was based on approximately 30% more sheep than current population. A new impact analysis will be needed to understand the implications and to help revise targets and strategies.

- **Adoption and utilisation.** Widespread adoption of innovation and skills to use best practice technologies will underpin a profitable and stable sheep industry. The CRC’s commitment to increasing utilisation and impact of new and existing technologies must remain a high priority.

**Recent Changes in the Australian Sheep Industry (the Disappearing Flock)**

The Australian sheep industry has undergone, and continues to undergo, significant restructuring. At the core of this restructure is a re-weighting of the value derived from the sheep and lamb
meat industries relative to the value derived from wool. In addition, there has been a sustained
decline in the size of the sheep population over the last 20 years.

These changes in flock size and relative value from sheep meat and wool are dramatic. This
report presents evidence of these changes and asks if they are sustainable.

Download

Recent changes in the Australian Sheep Industry (the Disappearing Flock) - Kimbal Curtis
(DAFWA) August 2009 (417.52 KB)

Situation, outlook and opportunities for the supply and demand of apparel wool

The global and Australian wool industries have shrunk steadily in the past two decades due to
competition from other fibres and other spending priorities for consumers on the one hand and
from alternative farming enterprises on the other.

This discussion paper provides an overview of the trends in the supply and demand for wool over
the past ten years, focusing on wool used in apparel and the situation for the Australian wool
industry. The drivers of these trends are discussed to assist the Sheep CRC and others in deciding
on programs that may address these drivers. Finally, the prospects for wool over the next 12
months and beyond are presented.

Chris Wilcox of Poimena Analysis has prepared this report with assistance from Kimbal Curtis
of the Department of Agriculture & Food WA, drawing on data and information from a range of
sources, including the International Wool Textile Organisation's Market Information report,
papers presented at the Market Intelligence Committee of the IWTO's Annual Congress (of
which Chris Wilcox is Chairman), the Australian Bureau of Statistics, the Australian Wool
Testing Authority, AWEX, the Australian Wool Production Forecasting Committee and
Australian Wool Innovation.

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Situation, outlook and opportunities for the supply and demand of apparel wool - Poimena
Analysis (September 2009) (661.84 KB)

Flock Projection Model

This model was developed to support a discussion paper prepared on the decline of the
Australian sheep flock. Results prior to 2008-09 for calibration/validation.

The model estimates lambs marked from opening number, percent ewes in the flock, percent
ewes that are mataed and marking percent (all user inputs).
Once you download the Flock Projection Model, save it to your hard drive and then open the Flock Projection Model tick the box 'enable this content' and click ok.