

On-farm testing in commercial Merino flocks is profitable

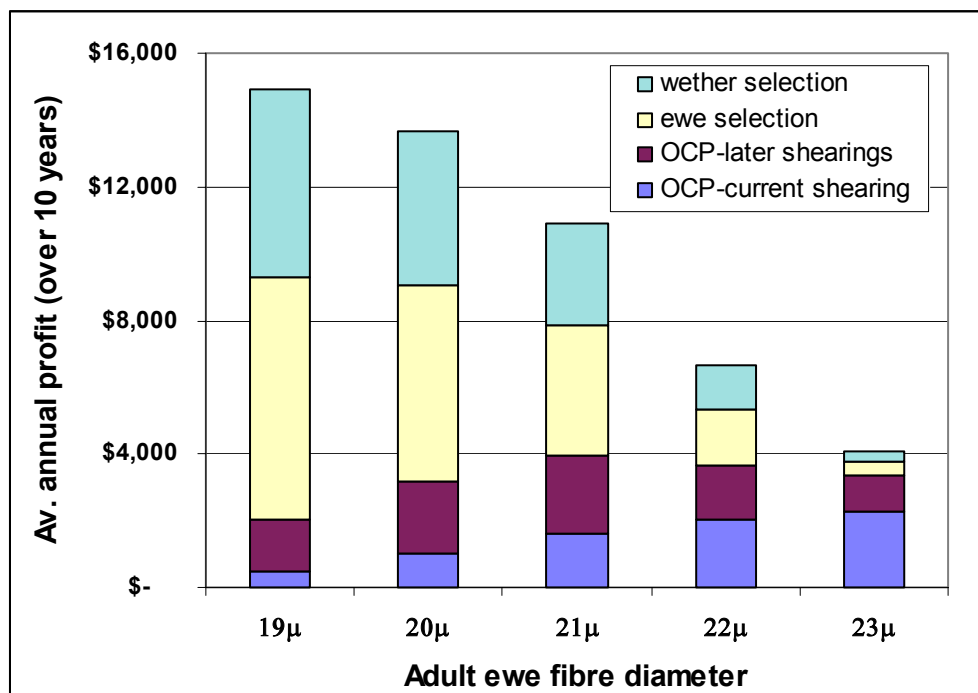
K D Atkins and S J Semple
 NSW Agriculture & Australian Sheep Industry CRC
 OAI, Forest Road, ORANGE NSW 2800

On-farm testing of fibre diameter can be an extremely profitable management aid for producers of Merino wool. Much of the uptake of this technology has been driven by being able to use the measurements to produce lines of wool from the current clip, which has been financially attractive over the past 3 years, particularly for producers of medium or broad wool. But, the additional benefits that arise from re-using the same information for other purposes are much greater:

- Clip preparation at subsequent shearings can double profit levels in most flocks
- The use of fibre diameter measurements to select replacements is an opportunity to greatly increase profits, particularly in fine- and medium-wool flocks

To illustrate the likely profits, using prices over the period 1998-2001, we have chosen an example flock of 2000 breeding ewes with or without a 1000 adult wether flock. The whole flock benefits of on-farm testing for objective clip preparation and selection are shown in the Figure below where all the costs of testing have been included and *average PROFIT per year* over a 10-year period has been calculated and discounted back to today's values.

Figure Long-term economic benefits of objective clip preparation and selection in a flock of 2000 breeding ewes and 1000 adult wethers



The conclusions are clear that the benefits are greatest when the basic measurements are combined for a number of purposes.

- For a 23 μ m flock, the profit from testing largely comes from objective clip preparation in young animals, the benefits from selection being very small. Still, for an investment of \$2,000 to \$3,000 per year to measure 800 young ewes and 800 wethers, a profit of about \$4,000 per year would be realised.
- In a 21 μ m flock, the benefits from objective clip preparation were greatest but still secondary to the benefits from selection. Overall profits were over \$10,000 per year in the ewe + wether flock for an annual investment of about \$3,000 per year.
- In the 19 μ m flock, the majority of the benefits arose from selection with very modest gains from objective clip preparation. Profit levels per year were up to \$15,000.

CONCLUSIONS

On-farm testing is a desirable aid for almost all producers of Merino wool. It is most profitable when animals are measured each year because the benefits from testing sheep keep on being delivered over the lifetime of the selected animals. In future, these same measurements will be useful for identifying segments of the flock that can be managed differentially for pasture utilisation, mating allocation or other management options. These options, which can be collectively described as a precision production system, can massively improve the profitability of the wool enterprise and lead to a revolution in the wool industry.

The information in this fact sheet is a summary of a paper "The benefits of on-farm testing in commercial Merino flocks", originally published in "Trangie QPLUS Merinos - Open Day 2002", Ed. B.A.Bartlett. pp 23-31. A copy of the easy to read 8-page paper can be obtained from:

Rachel Simpson
Australian Sheep Industry CRC
c/- NSW Agriculture
Orange Agricultural Institute
Forest Road
ORANGE NSW 2800

ph: 02 6391 3896
fax: 02 6391 3922
E-mail: rachel.simpson@agric.nsw.gov.au