CRC for Sheep Industry Innovation

Update — November 2008

The Information Nucleus

More choice for industry

The Sheep CRC's Information Nucleus (INF) program, with 5000 ewes mated to 100 industry sires annually across 8 sites nationally, has already had a huge impact on assessment of industry sires.

Many more industry sheep — not just the sires themselves — have more accurate Australian Sheep Breeding Values (ASBVs) for a wider range of traits, giving industry a more informed choice when selecting rams.

This particularly includes current traits that are difficult or expensive to measure: Worm Egg Count (WEC), Staple Length and Staple Strength and Birth Weight.

Reproductive performance targeted

Data from the first drop of the Information Nucleus showed that genetic variation for lamb survival can be exploited in breeding programs, though progress would be slow.

We predict a difference of 5% in survival of progeny from the best and the lowest ranking INF sires used. While heritability of lamb survival is very low, variation is high.

On a breed basis, progeny of maternal sires had higher survival than progeny of Merino or Terminal Sires.

Do big weaners mean big lambs and big trouble?

Achieving high weaning weights doesn't mean starting with high birth weights and lambing difficulties.

The 2007 drop Information Nucleus lambs showed that you can choose high growth sires (WWT ASBV) and be confident of not having oversize lambs if you also choose a low or moderate birth weight (BWT).

The Information Nucleus has now also added a considerable amount of Merino birth weight data to generate birth weight ASBVs.

Plain breeches, bare or both?

The Information Nucleus scored about 1500 animals for breech cover (how woolly or bare the breech area is) and breech wrinkle and showed that while breech cover has a relatively low heritability (0.09) breech wrinkle has moderate heritability (0.29) and more variation, allowing for more rapid genetic progress.

The scoring system used is from the AWI and MLA publication Visual Sheep Scores. A downloadable pdf version can be found on the Sheep Genetics web site: Visual Sheep Scores Sep 07.pdf

Come and see the sheep for yourself

Each of our Information Nucleus sites will have an Open Day in this financial year. A successful day was recently held at our Katanning (DAFWA) site.

The next two are:
Trangie Research Station, Trangie NSW (NSW DPI) — 20 November 2008
Struan Research Centre, Naracoorte, SA (SARDI) — 27 November 200

Sheep CRC web site: www.sheepcrc.org.au

Transforming wool, meat and the sheep that produce them