final report

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Improving Reproduction Rate

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Overall Aim
To increase the number of scanned foetus which are sold by 12 months of age? The group realised that this is made up of a number of parts, conception, lamb loss at birth, after marking and after weaning. This PIRD was aimed at part of the overall problem because no one could provided answers on the issue 'how many foetuses are lost in utero'

Objectives
To measure the loss of twin foetus between day 90 and day 130 of pregnancy.

Methodology
Rescan twin merino ewes at day 125-130 of pregnancy on 6 member's properties who already scan regularly. From this data, work out the loss of foetus rate in twins ewes.

There had to be a change to this process as the scanner was not willing to scan later than day 115. Also due to tough seasonal conditions there was the problem of pregnancy toxaemia from locking up twin ewes for scanning. This caused 2 early lambing flocks to drop out.

Data
Scanning.
This project enabled the scanning contractor to test the ability of the equipment to scan later than is done commercially. He is now confident that the scanning window is longer than thought, ie **up to day 115** .

Scanning data.
520 twin ewes were rescanned on 3 properties (2 dropped out as mentioned above), around day 110 to 115. The number of twin ewes per property was lower than expected due to seasonal conditions.

Only 3 ewes were "dry" on the second scanning. On 1 property 2 extra ewes were present at the second scanning. 2 "dries" were detected here but it could be that these ewes were the extras.

The worst case situation is **3** ewes out of **520** had lost their foetus or **0.6%** .
The likely case is that **1** ewe out of **520** had lost their foetus or **0.2%**

Wet and Dry
A property outside the area wet and dried their twin ewes and recorded similar low numbers **6 out of 629 or 1%.** Wet and drying is not as accurate as a lambed and lost could have been recorded as one of the 6.

In light of this data it was decided not to scan more flocks.

Results
There was a 'view' that we might be losing "20%" of foetus therefore reducing the potential lambs from 200% to 180% in twins. This worked showed that the losses are very small. Increasing the number scanned might have resulted in a larger percentage loss but the likelihood of this being above 5% is highly unlikely and the chance of approaching 20% not feasible. Pasture mass wa tight to average so the work was conducted in realistic conditions.

To some degree the issue of foetus loss has been used as a part excuse to explain the district loss of 40% of twin lambs. No longer can this be used as a reason to explain the loss.

The weather for the lambing of 2007 was very good. In fact most properties did not have 1 weather, lamb killing event. Marking percentages of 150% in merino twin ewes were recorded. On these properties the marking figure was 20 to 30% up on what had been achieved before. This shows the impact of the weather on the loss of twins.

Take Home Messages
The potential lambs scanned are very close to the number of lambs born. The high loss of twin lambs is a combination of inadequate ewe nutrition in the last 3 weeks, weather condition impacting on the smaller lamb and ewe fat score being too low. These 3 factors work in combination.

Twins ewe should be supplemented if pastures are below 1000 kgDM/ha, .during the last 3 weeks.

The issue of shelter is a long term problem, but needs to be addressed as the weather killing events will always occur in this area.. The shelter needs to be more than shelter belts. There needs to be small areas of shelter they can be in and under during “bad periods”.

Twin ewes should be lambed down in mobs of no more than 250 ewes per paddock. This was not part of the project but comes from producer experience over the years.

Extension conducted
The outcome of this work will be extended to group members at the start of the 2008 breeding cycle. This occurs at the group’s annual ewe competition. Talking about the results now has no impact due to it not being relevant to current issues. The group was satisfied with the work as it provided data which was not available to them before.

Improving the Project
The only way this project could be improved would be for it to be conducted on a research facility where more scanning could have been carried out. You could not expect producers to do any more than what was done.

Is the group interested in doing another project?
The group would be interested in doing another project if we see a need for research that has not been previously done.

Would you recommend other Groups run their own trials?
We would recommend other groups to run trials, to help expand the knowledge of our industry and to share that knowledge with other producers.

How would the Members sum up their experiences in doing the MLA PIRD project? (What was the bottom line?)
In doing this project, the group has a better understanding of the foetus losses in twin scanned ewes. It has helped us to concentrate on what are the most important factors in gaining more lambs.

Comment on the organisation and management of PIRDs, this will assist MLA in better management of future projects.

We had a breakdown in communication to start with, which meant we were too late to run the full trial that we had planned.