

final report

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Low Stress Cattle Handling Systems in AI

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Our Objectives

a) Increase production

A \$ value can be obtained by comparing the results currently commonly obtained conception rates of 50% in Bi heifers after AI compared with the prospective achievable rates of 78%. This would realise an increase of \$7200 profit over 100 breeders (18 more weaners at a value of \$400/hd).

b) Education

Educate other beef producers on the benefits of using Low Stress Stock Handling in their herds by disseminating results.

Encourage seed-stock producers to employ Low Stress Stock Handling in AI programmes to increase conception rates

c) Dissemination

Publish results of the trial in producer journals

What has been done

All producers involved in the school attended a 2 day workshops run by LSS Australian company which was run especially for the participants at Goondiwindi. The owner of the LSS company offered to send instructors to each of the properties at the initiation of the trial, however, Mirri Mirri did not receive an instructor on site as the instructor in their vicinity moved.

650 heifers were offered by the group for use in this trial. 290 were used at Ravensbourne, 70 were used on Mirri Mirri and 310 are to be used at Rosevale. Half of these heifers on each property were included in the low stress group, the other half left in the paddock until immediately prior to the AI program. All heifers were then run back in the paddock pregnancy testing at 35 days.

All heifers were vaccinated against pestivirus, leptospirosis and clostridial diseases, one month prior to A.I. The Rosevale group also received vitamin A and D .Each low stress group of heifers experienced intensive 1day of handling by experienced Low Stress stock handlers one month prior to the start of insemination (except at Mirri Mirri where the property owners did this themselves). Each week after this they spent at least 2 hours walking through yards and crush.

During the AI program both groups received the same treatment. All were blanket A.I'd 2 days after CIDR removal with a second dose for those returning to heat that afternoon or second dose on the morning of the 3rd day.

At Rosevale the 2 A.I.'s were supplemented with further A.I. on heat detection.

What did the Group learn by doing the trials?

In answering this, consider:

Did the Group achieve the results planned at the beginning?

Producer comment: The low number of pregnancies was disappointing. Nutrition (lack of) was the major contributing factor. We expected that the LSS mob would have returned a higher pregnancy result than the control mob but this was not the case. This reinforced my original thoughts that at a time when nutritional stress caused by poor seasonal conditions is a factor, the effects of lack of feed may outweigh the extra handling which kept animals off feed at a critical time.

Second producer: We certainly gained from LSS school - disappointed with preg test results as over 95% in calf now.

What changes members have made as a result of doing the project, or what changes are planned as a result of running the trials?

Producer comment: We will certainly be continuing with principles learnt in the Low Stress Stockhandling school as the cattle are noticeably more settled. We also learnt that we cannot rely on fixed time AI programs without the use of heat detection.

Trial measurements. Have these enabled you to show the economics of the outcomes and what benefits [dollar] members may be able to gain? How have/will members improve their bottom line?

Producer comment: As above in relation to LSS School. The easier cattle handled, the less weight they will lose when put through yards.

Was the Group satisfied with the results of the project?

Comment: No, for the amount of work done, Pregnancy % was very low.

Second comment: PD% very low. We were satisfied with management of trial but a pity AI inseminator was not on same wave length.

How could you have done the project better?

Producer Comment: Under the seasonal conditions we should have been heat detecting right from Day 1. However, we did adapt and change our practices when we realised this and as a result obtained more pregnancies than other programs.

Is the group interested in doing another project?

Producer Comment: We have a fair way to go with this one yet! (comment from UQ- this forms part of a larger project the producers have volunteered to enter with UQ) Certainly would like to wait for more favourable seasonal conditions before considering another.

Second producer comment: As we are trying to sell and are selling nearly all cattle on 1st June we are not interested in another AI trial.

Would you recommend other Groups run their own trials?

Producer Comment: Yes

How would the Members sum up their experiences in doing the MLA PIRD project? (What was the bottom line?)

Producer Comment: Above statements are relevant here. Opportunity to do LSS School was much appreciated. I would certainly look at enrolling any new employees in a school and have already had my wife and kids attend a school. What lies ahead in regards to Semen Morphology is probably of more interest to me.

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

Producers were generally happy with management. The organization of the bank account between persons who were not an established organization was very time consuming.

Results;

All data results are attached in the adjoining Excel files.

This A.I trial was affected by the ongoing drought. Large amounts of supplementary feed were donated to the trial by Ridley Agriproducts to enable us to go on with the trial. However, the lack of green feed may have influenced the pregnancy percentage. Also, the length of time between the withdrawal of CIDR and estrus was noticeably extended in these heifers. Whether this means that progesterone is metabolized more slowly in this breed than in previous cross bred cattle or whether their condition influenced metabolisation of progesterone we cannot say.

There was a significant difference between the LSS and the control group in the one year old heifers at Mirri Mirri. There was no difference between control and treatment in the heifers at Ravensbourne or Rosevale. At Rosevale the effect of LSS may have been compromised by the necessity of heat observation and A.I of these LSS cattle being in the afternoon when the controls were done in the morning. On all properties more heifers were observed in estrus in the morning rather than the afternoon. This was due to the requirement of running the LSS on a different property where there was feed.

Conclusion;

We can conclude that all participating producers felt there was a commercial benefit to completing the LSS course. However, only on one property was there an effect of LSS on conception rate.