

Calving boost for first-time heifers

SA's Limestone Coast region was fertile ground for a group of 19 beef businesses as they uncovered ways to improve their breeders' reproduction rates and optimise performance between first-time heifer joining through to second calving.

The group, which collectively managed more than 18,000 breeding cows, took part in the three-year MacKillop Farm Management Group and University of Adelaide co-funded MLA Producer Demonstration Site (PDS), 'Reproductive health and management practices for beef heifers'.

They were keen to address a range of challenges impacting their herds' reproductive success, including worm burdens, disease and the lack of adequately-tailored nutrition for class and reproductive status. Discussions and problem solving focused on how to hone decision-making around joining periods, body condition monitoring, calving times, supplementary feeding, fertility testing and harnessing genetics.

Results speak for themselves

Despite each producer having unique circumstances and goals, strong results were achieved across the group as a result of implementing the strategies identified in the PDS (see below).

Stand-out results included:

- Heifer conception rates increased from baseline levels of 80% in 2019 to 84% in the 2021-drop of heifers.
- Re-conception rates of the 2020-drop heifers (as second calvers) increased from 88% (baseline) to 92% in 2021.
- Heifer mortality reduced from 2.7% in 2019 to 0.6% in 2021.
- Heifers needing assistance at calving reduced from 13% in 2019 to 4% in 2021.

Stronger together

The project's results and insights into maximising heifer fertility in large part

came about thanks to the participants' spirit of collaboration and willingness to dive into the data and share their knowledge and experience.

The group undertook 12 interactive, technical sessions at each property, where they had access to researchers, veterinarians, livestock advisors and their fellow participants' experience. By the end of the project, they reported a 19% increase in knowledge and a 13% improvement in their confidence to manage their breeding herd for improved health and reproduction. Overall, the producer satisfaction rating for this PDS sat at a solid 91%.

PDS participant and project facilitator, livestock consultant Elke Hocking (see article opposite), said having access to both experts and the group's combined, on-the-ground know-how made all the difference.

"The variation in management systems within the group was extensive with a range of calving times, different breeds, different animal health plans and different target markets," she said.

"It was great to be able to learn from other producers and consider which things would be most suitable to adopt within our own production system." ■

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Top tips for heifer reproductive success

- ✓ To achieve 85% conception rate in six-week heifer joinings, aim for pre-joining liveweights of 60% of mature cow weight.
- ✓ To optimise re-conception, ensure heifers reach a target liveweight of 85–90% of the mature cow reference weight leading into their first calving.
- ✓ A body condition score (BCS) of three, combined with high quality feed on offer through joining, will also contribute to re-conception success.
- ✓ Check bulls for fertility, reproductive diseases and physical injuries prior to joining to improve conception rates.
- ✓ Invest in fixed-time artificial insemination for a condensed calving window and selection of high-quality genetics to produce replacement heifers.
- ✓ Select bulls with low gestation and high calving ease estimated breeding values (EBVs) to reduce the incidence of calving problems.
- ✓ Consider Days to Calving EBV – lower values are associated with getting heifers in calf early and returning to oestrous sooner after calving.
- ✓ Match nutrition to heifers' growth phases, stage in the fertility cycle and seasonal feed availability.



TOOLBOX

Learn more about this PDS: mla.com.au/pds-beef-heifers

Scan or click the QR code to access a webinar and podcast on the PDS:



Access PDS resources – including the e-news, the PDS search tool and how to get involved: mla.com.au/pds

Grazing land management hub: mla.com.au/grazing

Understand estimated breeding values (EBVs): mla.com.au/temperate

Access the stocking rate calculator, feedbase planning and budgeting tool and feed demand calculator with your myMLA account: etools.mla.com.au/hub

Visit MLA's Feedbase hub for tips on providing optimal nutrition for reproductive success: mla.com.au/feedbase-hub

Six steps for fertile heifers

South-east SA cattle producers Elke and Peter Hocking's involvement in MLA's three-year Producer Demonstration Site (PDS) program helped them hone their management strategies to achieve optimum reproductive performance.

Here are six key steps the Hockings took to getting the best out of their Conmurra breeding herd.

1 Time calving right

Elke and Peter operate a split calving schedule with heifers calving in autumn and cows calving in July/August. This allows heifers plenty of time to recover between their first calving and their second joining in October.

Elke purchases March/April-drop heifer replacements from her father on Kangaroo Island. This approach ensures optimal pre-joining weights are achieved for a June/July joining.

2 Tailor nutrition

Elke calculates her herd's mature cow reference weight to set accurate target weights for heifers.

"We conduct body condition scoring and measure heifers' liveweight throughout the year, to keep them at the ideal weight according to their stage in the reproductive cycle," Elke said.

Pregnant and lactating livestock are managed according to their nutritional requirements and supplemented with hay if pasture is not available, as was required throughout 2024.

3 Monitor to measure

Regular body condition scoring and pasture assessment (quality and quantity of available feed) ensures the herd's nutritional needs are met. Elke said practicing these skills during the PDS was invaluable, to ensure targeted and cost-effective supplementation.

One of Elke's go-to resources for fodder budgeting is MLA's Feedbase planning and budgeting tool, which includes a comprehensive list of the nutritional requirements and pasture intake of different classes of livestock.

"Last year, drought conditions meant we had no substantial pasture growth until late August, so high rates of supplementary feed were necessary," Elke said.

She said another great resource to guide nutritional requirements was Agriculture Victoria's beef cattle drought feeding guide.

4 Conduct foetal ageing

Peter and Elke pregnancy test at six weeks after joining to identify dries – these are finished for the grassfed market. Foetal ageing identifies 'earlies' and 'lates' which can be managed according to their nutritional requirements.

They use an electronic identification (eID) stick reader – the alert function makes splitting up the herd according to calving time quick and easy.

With a tight calving window for each group, managing earlies/lates separately saves time checking calving cows and enables targeted pre-calving health treatments.

"To ensure newborn calves receive adequate immunity from colostrum post-calving, vaccinations four to six weeks pre-calving are most effective," Elke said.

During the 2024 drought, Peter and Elke prioritised better quality hay to cows in the first cycle, while the lates stayed on lower quality straw until closer to calving in August when feed started to improve.

"We more than made back our investment in foetal ageing with this strategy," Elke said.

5 Fertility test bulls

Since participating in the PDS, Peter and Elke use a veterinarian to fertility test bulls six weeks before joining. With a 20–30% bull failure rate, this eliminates surprises at pregnancy scanning and allows time to get a replacement bull.

Nutrition, age and injury can impact bull fertility, so examining sperm motility and morphology, as well as doing physical checks for structural damage, are key.

6 Be flexible

Dry conditions meant calving cows dropped to a body condition score of two last year. This meant they would take longer to return to oestrous post-calving, so Elke delayed joining by two weeks.



**ELKE AND
PETER HOCKING –**
'Scotglade Pastoral',
Conmurra, SA



AREA

1,280ha

ENTERPRISE

310 breeders, 400–600 weaner cattle,
2,800 first-cross ewes joined to White
Suffolk rams

PASTURES

Phalaris, sub-clover and annual grasses

SOILS

Sand over clay through to black flats

RAINFALL

600mm

"Fortunately, the feed on offer improved dramatically in spring and with a rising plane of nutrition throughout joining in October/November, we achieved 97% conception rates across our adult cows," Elke said.

"During the same period, our steers were growing at 2–2.8kg per head per day which was an indication of the quality of feed at the time of joining."

Following tougher conditions last year, most of their purchased 2024-drop heifers are generally lighter than normal and will require supplementary feeding to ensure adequate weights are reached by joining, or alternatively delaying heifer joining to match in with their cows.

"While it's good to have a relatively stable system, it's important to be flexible with timings and adapt to the season accordingly," Elke said.

➔ [Learn more about the 'Reproductive health and management practices for beef heifers' PDS on previous page.](#)



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