

**LRF/BREEDPLAN NEWS**



**Days to Calving - The Female Fertility trait**

Fertility is one of the main traits that drives profitability within a beef cattle herd, as a herd needs to produce calves to have product that can be sold. It is therefore very important for breeders (commercial and stud) to improve the fertility within their herds, and by doing so, also improve the efficiency and subsequent profitability of their herds. Different traits can be used as an indication of fertility in a cow herd, the focus of this article will be on Days to Calving, the female fertility trait used by BREEDPLAN to express the genetic differences between animals in the time from the start of the joining period (i.e. when the female is introduced to a bull) until the subsequent calving.

As is the case with most fertility traits, days to calving is lowly heritable ( $\pm 10\%$ ), differing between breeds, populations, etc. Its low heritability is an indication that the environment to which the heifers and cows are exposed to, greatly influence their days to calving. But what is important to realize is that there is a genetic component to it and variation exist between animals and therefore genetic selection and improvement is possible. When compared to other fertility traits, e.g. Calving interval, some management effects are excluded as the breeder's decision on when to expose the cow to the bull for the first time during a breeding season does not affect her Days to Calving, but immensely affects her calving interval.

Days to calving EBVs are only calculated from natural matings and not from AI data. Due to its low heritability, the accuracy of most animals' EBVs are fairly low and often not displayed on Internet Solutions and sale catalogues. Consequently, it is very important for breeders to submit as many mating list records as possible, to increase the accuracies of their animals' EBVs. Lower or negative DTC EBVs are generally more favourable and indicate sires that will produce daughters with shorter number of days to calving and this effect will be cumulative over the life of those daughters.

**What Information Needs to be Recorded for the calculation of Days to Calving EBVs?**

Breeders interested in the Days to Calving EBV need to record all mating events (successful and unsuccessful) from the start of the mating period in each breeding season through to when the subsequent calves are born. The figure below describes all the information that need to be recorded for the calculation of Days to Calving EBVs.

The required information should be submitted to the society using an appropriate herd management software program, for example HerdMASTER, or by using the supplied Mating list and Days to Calving excel spread sheet. It is best to submit all the required information at the end of the mating season.

Please see attachments for the full article.

Sources: BREEDPLAN Australia Help centre and SBTS & TBTS Technical Notes

<b>Mating events</b>	<ul style="list-style-type: none"> <li>Cow ID</li> <li>Type of mating - Natural/AI</li> <li>Bull in date</li> <li>Bull ID/Multisire ID</li> <li>Management group</li> <li>Bull out date</li> </ul>	<i>All mating events of all breeding females - compulsory</i>
<b>Pregnancy test results</b>	<ul style="list-style-type: none"> <li>Pregnancy result - Pregnant, Non Pregnant or number of weeks</li> <li>Test date</li> </ul>	<i>Optional</i>
<b>DTC fate</b>	<ul style="list-style-type: none"> <li>Done at end of mating season</li> <li>Pregnancy outcome code that best describe why cow/heifer failed to calve (i.e. genetics or management)</li> <li>Fate date</li> <li>Fate code (i.e. not in calf, sold surplus breeding female, etc.) - does not cancel female at society</li> </ul>	<i>Compulsory</i>

**Feedback from LRF Stockman School 2020**



**Prof Bob Weaber: The Ideal Cow Size for Your Environment**

- The mature cow sizes of most beef cattle breeds in the US have increased over the years.
- Higher MCWs lead to higher energy requirements and therefore higher feed costs
- Body condition at calving greatly affects the re-conception rates of cows. The higher the BC scores, the higher the pregnancy percentages.
- Higher stocking rates are possible for smaller cows, which can lead to higher kg weaned per hectare.
- Small cows wean a greater percentage of their body weight
- It is important to view efficiency from a whole operation standpoint and not from a per cow per steer basis
- It is important to select cows that can be supported by the environment.
- Cull heifers and cows that do not conceive.



**Dr Brad Walmsley: The Advantage of Selecting for Feed Efficiency: For Feedlots and on Rangelands**

- Feed cost is the single largest expense in beef production and half of it goes towards the maintenance of the cow herd.
- There are various definitions or traits available to describe feed efficiency, Residual or Net Feed Intake is however currently the best trait to use to improve feed efficiency as it is independent of growth (ADG) and animal size (mature cow weight).
- RFI is moderately heritable (0.3 – 0.45), thus there is good opportunity to genetically select for it.
- Negative RFI values are favorable.
- Benefits to the Feedlot:
  - Low RFI progeny will eat less feed than High RFI progeny to produce the same product.
  - There will thus be a feed cost saving per head, without a change in product.
  - There is also an added benefit of a decrease in methane production
- Benefits to Rangelands:
  - No significant effect on reproduction
  - Lower feed intake for equivalent level of production (ad libitum feed)
  - Equivalent feed intake for higher production (Restricted feeding)
- Important not to single trait select, but to select for RFI within a selection index



**Dr Schabot Froneman: Animal health, key aspects you should be considering to make an immediate impact**

The Foundation of Herd Health:

- The cow herd is the functioning nucleus of the enterprise
- The replacement heifers are the future of the enterprise
- The neonatal period is the most critical period in the life of the individual animal
- Pre-breeding and pre-calving vaccination can improve neonatal health
- Colostrum management and strategic vaccination is the foundation for developing healthy replacement heifers and weaner calves
- Maternal immunity is transferred via colostrum
- Remember the herd health motto – prevention is better than cure!

**CALENDAR 2020**

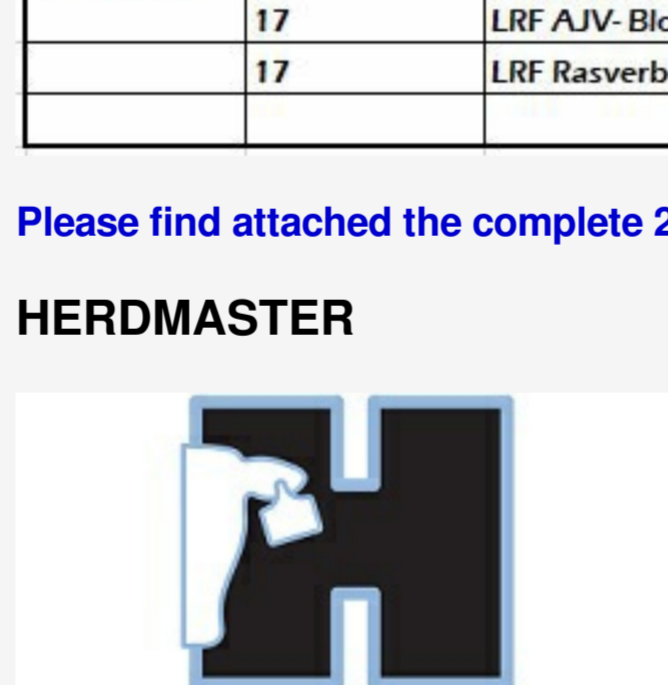
CALENDAR 2021		
<b>January</b>	4	LRF Office opens
<b>February</b>	10	HerdMASTER course - Natal
	17	LRF AGM- Bloemfontein
	17	LRF Breed Improvement meeting - Bloemfontein

KALENDER 2021		
<b>Januarie</b>	4	LRF kantoor open
<b>Februarie</b>	10	HerdMASTER kursus - Natal
	17	LRF AJV- Bloemfontein
	17	LRF Rasverbeteringsvergadering - Bloemfontein

Please find attached the complete 2021 Calendar.

**HERDMASTER**



**HerdMASTER tip:**

Thank you to all our clients for your loyal support throughout 2020. Part 3 of the HerdMASTER online training is available on our YouTube channel at: <https://www.youtube.com/watch?v=EE6mCm8Hgvc>.

Our office will close on the 15th of December 2020 for the festive season and re-open on the 4th of January 2021.

Please send all **urgent queries to [herdmaster@lrf.co.za](mailto:herdmaster@lrf.co.za)**, emails will be responded to as and when possible during the holidays.

Have a great festive season and travel safe.

Please subscribe to our HerdMASTER YouTube channel to watch all the latest videos. Please let us know if there is a specific topic you would like a video on.

[https://www.youtube.com/channel/UCAP8pg8yo0cEvmDngXXGVLw?view\\_as=subscriber](https://www.youtube.com/channel/UCAP8pg8yo0cEvmDngXXGVLw?view_as=subscriber)

For any HerdMASTER enquiries please contact **Jeanine Labuschagne** on +27 12 667 5258 / +27 81 844 4853 (Whatsapps welcome) / [herdmaster@lrf.co.za](mailto:herdmaster@lrf.co.za)

**HerdMASTER wenk:**

Baie dankie aan al ons kliënte vir u lojale ondersteuning gedurende 2020. Deel 3 van die HerdMASTER aanlyn-opleiding is beskikbaar op ons YouTube kanaal by: <https://www.youtube.com/watch?v=EE6mCm8Hgvc>.

Ons kantoor sluit op 15 Desember 2020 vir die feestyd en open weer op 4 Januarie 2021.

Stuur asseblief alle **dringende navrae aan [herdmaster@lrf.co.za](mailto:herdmaster@lrf.co.za)**, e-posse sal tydens die vakansietyd beantwoord word indien en wanneer dit moontlik is.

Mag dit 'n wonderlike feestyd wees en reis veilig.

Maak seker om in te skakel vir ons HerdMASTER YouTube kanaal to watch all the latest videos te kyk. Laat weet gerus indien daar 'n spesifieke onderwerp is waaroor jy 'n video wil sien.

[https://www.youtube.com/channel/UCAP8pg8yo0cEvmDngXXGVLw?view\\_as=subscriber](https://www.youtube.com/channel/UCAP8pg8yo0cEvmDngXXGVLw?view_as=subscriber)

Vir enige HerdMASTER navrae kontak gerus vir **Jeanine Labuschagne** by +27 12 667 5258 / +27 81 844 4853 / [herdmaster@lrf.co.za](mailto:herdmaster@lrf.co.za).

**SOCIETIES/COURSES**

**Animal Breeding Diploma course for Livestock Producers**

The annual Animal Breeding Diploma course for Livestock Producers held in collaboration with the University of the Free State, that normally takes place in November each year, has been postponed to **16 -18 March 2021**.

**Diploma kursus in Diereteelt vir Veeprodusente**

Die jaarlikse Diploma kursus in Diereteelt vir Veeprodusente wat in samewerking met die Universiteit van die Vrystaat aangebied word, wat normaalweg elke jaar in November plaasvind, is uitgestel tot **16 - 18 Maart 2021**.

**For advertisements in the LRF/BREEDPLAN monthly newsletter, please contact Mrs Izaan du Plooy at [office@lrf.co.za](mailto:office@lrf.co.za) or 012 667 5258.**

**Vir advertensies in die LRF/BREEDPLAN maandelikse nuusbriëf, kontak gerus vir Me. Izaan du Plooy by [office@lrf.co.za](mailto:office@lrf.co.za) of 012 667 5258.**