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The importance of PRODUCTION LICKS on the RECONCEPTION PERCENTAGE of cows & heifers

The mass and condition of heifers and first-calf cows at breeding time are critical to ensure that the calving percentage is maintained at a high level. Due to the fact that the first-calf cow still grows after calving, she has higher feeding requirements than mature beef production cows. This is where farmers lose a lot of money with low rebreeding percentages. The protein requirements of a first-calf cow with a mass of 400 kg are approximately one kg per day to ensure adequate growth and condition for rebreeding. The same mature cow will require 860 g protein per day and a dry cow will only require 530 g protein/day.

Research in South Africa proved that the rebreeding percentage differs by 20% between cows which calf at a body condition score of 2 versus 3,5 on a scale of 1 (extremely thin) and 5 (fat). It is therefore critically important for your cattle to maintain their condition during the last part of the winter, by providing a production lick.

The peak weight of cows at the end of the summer also has a huge influence on the mass changes which will be experienced during the winter. The lower the mass at the beginning of the winter, the lower the mass will be at the end of the winter, which will then delay the cow's recovery process and will decrease the probability of successful breeding after calving.

Should the grazing quality decline during early autumn, resulting in lower and early peak mass, a production lick such as **Molatek Master 20** (V0667), **Background 18** (V21955), **Molatek Condition Lick** (V17730) or the maintenance licks, **Molatek Protein Lick** (V16048), **Winlick**, (V14344) and **Dryveldlick** (V20820) 50:50- mixed with grain-should be given to the cows. Cattle farmers with maize available, can mix their own production licks on the farm: 240 kg **Lick Mix 87** (V19783) + 500 kg maize meal + 50 kg P12 + 200 kg salt. Make sure that heifers and cows in the late stage of pregnancy receive 200 - 250 g of protein during late winter, depending on the frame size and grazing quality.

Protein provided to growing pregnant first-calf heifers must be made up of a mixture of protein from non-protein nitrogen (NPN) and natural protein, since natural protein, such as protein obtained from soya-oilcake, improves frame score. Natural protein in licks are particularly beneficial for young, growing animals and cows during pregnancy and lactation. Molatek combines natural protein with NPN in **Molatek Condition Lick** (V17730), **Master 20 and Background 18**, which can be given to young, growing animals for the full duration of the winter and to cows in a late stage of pregnancy at the end of the winter, when the cows' supplementary protein requirements are higher. During late pregnancy the cow's protein and energy requirements are higher and the trace mineral requirements increase by 40%, due to the requirements of the fetus. Calves born with trace mineral deficiencies have a lower resistance against bacterial infections and they die easily within the first three months after birth. It is extremely important for the first-calf cow to reach or maintain the ideal condition (body condition score of a minimum of 2.5 and ideally 3.5) after calving, which will ensure successful re-conception. Should she not reach the correct condition/mass at the time of breeding, it would translate to the direct loss of a calf, as well as the cost

of carrying the animal on the farm for another year. First-calf heifers with a low conception percentage can be culled immediately if the percentage of unsuccessful conception within the group is not too high and in the region of 15%. It could indicate animals which are not as hardy and which are less adaptable to the conditions on the specific farm. It could serve as a good selection method.

The following will prevent low re-conception and calving percentages by first-calf cows and mature cows:

- Provide sufficient phosphate in summer, **6 - 12 g/cow/day**. Use **Molatek Foslick** (V16059) at 120 – 240 g/cow/day or **Fosblock** (V22502) at 100 – 200 g/cow/day.
- Breed heifers, if possible, a month before the rest of the herd, to allow them a longer recovery period before the second breeding. Care should, however, be taken with the system, since it is not always practically possible within the farming set-up. The period until green grazing will be available again, is much longer and larger quantities of production lick has to be provided.
- Provide **Molatek production licks** as recommended above to pregnant and growing heifers, at least from August to at least a month after the first good summer rains. The production lick can be continued with if the body condition score is lower than 3 by breeding time. Remember, the first-calf heifer should weigh approximately 85% of her mature body mass when calving for the first time.
- Creep feeding for the calves of first-calf cows will also limit weight loss of cows, due to the fact that the calf will require less milk and it will be possible to wean the calves at an earlier stage.
- Correct grazing management must be applied at all times.

The focus with lick supplements should be to approach it as a complete system and not to compartmentalise it in seasons. Adjust your system to changing feeding conditions.