

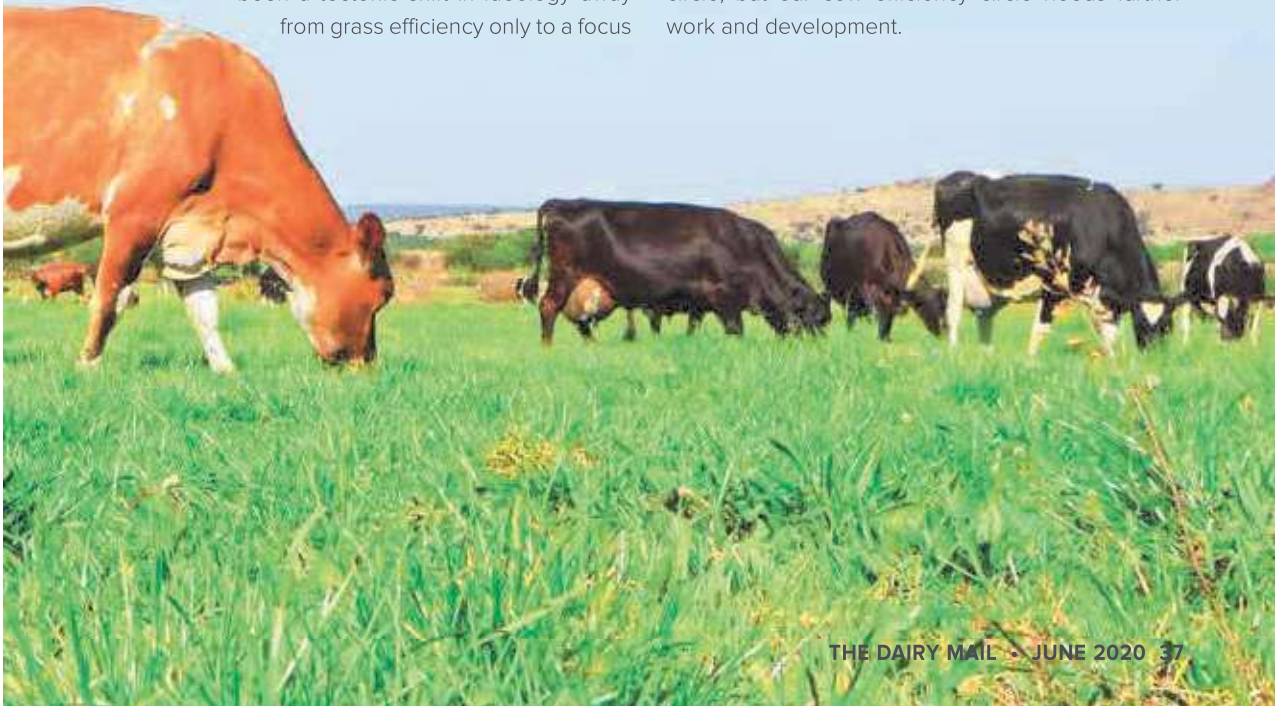
# COW-CENTRIC PASTURE POWER

by Elizabeth van Papendorp

South African pasture-based dairy farmers are arguably the best grass farmers in the world, especially considering the harsh climate in which we farm so successfully. Our intense focus on pasture growth and harvest rates has served us well in the development of a robust and profitable pasture-based dairy industry.

**H**owever, recent local and international developments may require a re-evaluation of what has become the status quo. In many areas, there has been a tectonic shift in ideology away from grass efficiency only to a focus

on whole-farm efficiency, that is, an emphasis on the grass and the cows that harvest it. If we imagine pasture dairying as two circles, we can say that we already have a strong, robust pasture efficiency circle, but our cow efficiency circle needs further work and development.



**PASTURE-CENTRIC VERSUS COW-CENTRIC**

There is obviously a point in any business where it is possible to overspend in an attempt to maximise profit. Pasture dairy farmers are well aware of this hazard and should shy away from trying to feed for production the way the farmers feeding total mixed rations (TMR) do. But suppose we could make more money by having a more efficient cow, rather than by feeding her more. Our base wouldn't change but, by improving the cow's efficiency at turning grass into milk, we could reap the rewards of significantly higher outputs from comparable inputs.

A renewed focus on all aspects of cow efficiency will change how well the cows utilise pasture and feed. We talk about being MAD 'paying meticulous attention to detail' about our pastures. If we were equally MAD about our cows, we could use the synergy between the two to achieve gains we never thought were possible.

**TAKING CARE OF OUR COWS**

In the dairy industry, we are seeing a smaller number of dairy farmers who are farming on a larger scale

and producing more milk than ever before. At some point, when we have physically expanded our business as much as we can, we will need to build on what we have – picture skyscrapers instead of suburbs or one-story houses. This will require a new focus on efficiency and productivity. Cow health provides the biggest opportunity for further improvement.

Cow health is a crucial factor affecting efficiency and productivity. Immune-compromised cows will not harvest feed and convert it to milk effectively, let alone conceive when we expect them to. The cow is the hardest worker on a dairy farm. As milk production increases, so does the cow's stress load. We can support her by ensuring optimum nutrition and cow comfort. Consider the following ways of improving cow efficiency.

**Inflammation mitigation**

Any inflammatory process in the body triggers an immune response, which is a hugely energy-expensive process. By reducing immune activation and inflammation in the cow's system, we save

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energy that can be used for production and reproduction.

**Heat abatement**

Heat stress in cows triggers a phenomenon called leaky gut. In the lower gut, this causes the cells in the gut to separate and the gut contents to leak into the body. The body reacts to this intrusion by activating the immune system, utilising large amounts of glucose which would otherwise have been used for production and reproduction.

**Vitamin and mineral supplementation**

Ensuring optimal vitamin and mineral status in the cow equips her with a strong immune system and the ability to resist immune challenges when they inevitably occur. This allows her to be more resilient and less susceptible to disease, while also supporting high production and reproduction levels.

**Dry cow focus**

Transition cows are your most important cows! The dry period is crucial in determining lactation and reproductive performance. Although not in milk, the cow is actively recovering from

lactation while growing the next generation of dairy cows. A high standard of management around the dry cow, especially the transition cow, will help your cows start their lactation on the right hoof and enable them to perform at their best.

**Lameness management**

Lame cows are classified according to the severity of the lameness, with increasing milk loss positively associated with an increasing lameness score. As a result, lame cows struggle with high inflammation levels, often resulting in high somatic cell counts, which is an indicator of inflammation in the cow.

**BECOMING COW-CENTRIC**

Attention to the above aspects of cow health and comfort will help to improve your herd's productivity and efficiency. By targeting our cows, we can expand our business without physically expanding our footprint. Dairy farming is all about finding the sweet spot – how to make sure the two most important aspects of pasture-based dairy farming get along. Happy cows and healthy pastures will yield cow-centric pasture power – and a profitable dairy farmer! 