

# Regenerative farming for naturally produced products

*A regenerative farming system is used in North West to produce veld-reared beef, free-range chickens and eggs, and raw honey on a sustainable and profitable basis. These products are marketed under the farm's own brand in order to add value to the farming enterprise.*

DF Fyfer farms 50km northwest of Vryburg in the Louwna area of the Kalahari thornveld. In addition to the grass species, camelthorn trees, raisin bush and wild sage the area is known for, Vryburg, and Louwna specifically, is regarded as one of the best areas in South Africa in which to rear cattle.

## A new approach to farming

The area receives around 500mm of rainfall each year, but over the past few years it has been well below average. This prompted DF to take a critical look at his farming enterprise; his conclusion was that he needed a new approach.

DF attributes his interest in regenerative agriculture to his father and while studying

the ins and outs of the system, he realised that instead of being just a grass farmer, the health of the soil should also receive attention.

Farming entails the entire ecosystem – not just cattle. It is very important to understand that if it isn't in the soil, it cannot be transferred to the grass and, ultimately, the cattle. Healthy soil and cattle are interrelated.

The major difference between this system and the traditional way of cattle farming, is that production on a conventional farm is usually measured in the kilograms of meat produced by each animal. DF has a different approach; he measures kilograms of meat produced and profit per hectare.



A 17-month-old, in-calf Beefmaster-Mashona crossbred heifer.

## Stocking rate and fertility

The two most significant contributors to a sustainable and profitable beef enterprise are the stocking rate (the number of animals that can be accommodated on the grazing) and fertility of the cow herd. "I therefore try to carry as many animals as possible on the grazing without compromising fertility. But achieving this is quite tricky," says DF.

To realise this goal, he mimics the natural migration pattern of game. Years ago, thousands of springbok roamed the area, grazing the grass short and then moving

on to a different area, only to return a year later.

"We stock the veld with 500 to 1 000 head of cattle per hectare and, depending on the time of year, move them two to three times per day. It has the same effect as the migrating game. This keeps them from grazing selectively as they cannot consume all the sweet, sour, pioneer, climax or sub-climax grasses."

It has the same effect that predators have in nature. When predators are around, game herds tend to graze closely together. It also offers the veld a chance to rest, which is crucial for increasing the success of the system.

With this type of ultra-high-density grazing, the animals essentially cultivate and fertilise the soil for the producer. The cattle trample the organic matter into the soil, where it serves as a nutrient-rich food source for the micro-organisms in the soil. It also helps water to penetrate the soil and enhances the soil's ability to retain moisture.

## The challenge of condition

To unlock the full potential of regenerative farming, it is essential to maintain the animals' condition. A high stocking rate on the veld is negatively correlated with condition. The more animals kept on a piece of land, the poorer their condition, and the more difficult it becomes to increase the conception rate.

Three steps can be taken to solve the challenge of condition:

- Provide extra feed.
- Apply proper on-farm management.



parasite and disease resistance. The Boran deposits fat well, which is distributed evenly on the carcass (this is an important trait since the cattle are finished on the veld). Apart from its uniform red colour, the Mashona is a polled breed that requires less labour, and the Beefmaster has fantastic meat traits as well as superior milk production.

These traits make it possible to breed a well-adapted animal that can sustainably produce more kilograms of meat per hectare.

### Diversifying is key

His farming enterprise, says DF, is on a new trajectory, but to get there meant that he had to change his way of thinking. He also had to move away from the notion that he knows what he is doing. "You have to question everything and learn from your mistakes. One can learn a lot from your own trials and data."

One of the changes he made was to move away from single bull matings to multi-sire matings in order to produce a particular type of animal.

DF also makes use of stacked enterprises and bought in approximately 1 000 layers and 1 000 broilers. The chickens are kept in specialised coops on the veld and there is electric netting around the coops to keep the chickens in and predators out. The coops are moved regularly, which means the chickens can contribute to improving the grazing by spreading their own as well as the cattle's manure and by combatting pests.

The latest addition to the farm is honeybees. To keep the bees on the farm throughout the year, DF planted flowers and shrubs close to the watering points. In addition to the honey they produce, the bees also help pollinate all the plants in the ecosystem.

The plan is to process, pack and market the beef, eggs, chickens and honey directly to the consumer as grass-fed, naturally produced, free-range products under the brand Pure Veldt.

There is a growing awareness among consumers of the importance of their health, the traceability of products, animal welfare, and how to read the 'fine' print on the labels of products. This system fits these requirements like a glove, says DF. **SF**

DF uses Mashona bulls on Beefmaster cows to breed an animal with specific traits that will enhance their performance.

- Breed animals that can increase their weight on veld.

DF navigates this challenge by moving the cattle three times a day and by keeping the animals' stress levels to a minimum.

### Breeding the perfect hybrid

Regenerative farming requires animals that can adapt quite easily. DF farmed Nguni as well as Beefmaster cattle, but he soon realised that he needed a

hybrid animal. With the help of well-known South African cattleman Johann Zietsman, DF used Boran bulls on the Nguni cows and Mashona bulls on the Beefmaster cows. He bred the progeny of these F1 cattle to produce F2 progeny that comprised 25% of each of the four breeds used. DF calls this cross the 'Adapter'.

The four breeds complement each other perfectly. The Nguni offers hardiness, fertility, early maturity, and excellent



Chickens are kept on the veld in specialised chicken coops. Their manure enriches the soil and they help to spread the cattle manure and combat pests.

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