

# SIMMENTALER

## — a ‘universal’ breed

**Dr Thomas Grupp** and **Stephan Voigts** give an overview on the trials and tribulations of Simmentaler breeding.



The Simmentaler is one of the world’s ‘universal’ breeds that can produce milk and beef on an equally high level through extraordinary fitness and feed efficiency, especially in terms of protein gain.

The excellent adaptability of pure Simmentaler and Simmentaler cross-breeds in different environments offer a breeder many options. The Simmentaler is good for cross-breeding: a Simmentaler bull is excellent for use on Brahman, Bonsmara, Nguni or dairy cows. As a dam line, the Simmentaler has a basis for successful beef production.

The best genetics is useless if the cow can’t produce enough milk to wean a heavy calf. Try putting a Simmentaler bull on any *Bos indicus* or synthetic breed for high quality carcasses.

The most important goal for Simmentaler breeders is to improve productivity in a variety of production systems and environments.

The end-products that a farm produces using Simmentaler genetics (whether breeding animals, bulls, weaners, slaughter stock, culled cows or milk) must ensure an adequate income for the farmer. Consequently, Simmentaler

breeders put great value on beef traits.

It is becoming increasingly important for any cattle breed to have a balanced and harmonic body. This boosts the consumer’s confidence in the animal’s products.

### ‘GENOMIC SELECTION IS A CHALLENGE FOR THOSE INVOLVED IN BREEDING & ARTIFICIAL INSEMINATION.’

Dr Thomas Grupp and Stephan Voigts compiled the following summary of an article on Simmentaler breeding published in the Bavarian-Genetics magazine, *Fleckvieh World*.

#### FROM THE HORSE’S MOUTH

Simmentaler cows are bred for dual purpose, medium size, excellent muscle, robustness and efficiency, suitable for the production of beef and milk in all production systems. Breeding aim is measured in EBVs. These figures have to be adjusted according to farm goals.

In a case study, a cow with a liveweight of 400kg to 650kg had milk production of 4 000kg to 6 000kg (10 times its liveweight) with a weaning



weight of 215kg to 320kg. Age at first calving was 26 to 32 months, and it produced an AB grade carcass weighing 230kg.

#### TYPE AND HARMONY

Simmentaler cows might show slight deviations from their traits at the age of 1 year, before the first lactation, and as old cows.

A Simmentaler yearling’s frame should allow for a clear prediction for the future use of the cow. The pelvis has to be large enough and the neck should have enough muscling.

For dual purpose breeds, breeding goals are often complex and scientifically expressed:

- **Power** is measured as general fitness, a productive lifetime, fertility, calving ease, low still-birth rate, high daily gain and a quality carcass.

- **All-round and milk** are measured in dairy industry terms but also in terms of higher weaning gains. In-between, there are different sub-types depending on the type of the cow/heifer for which a bull is selected. Whereas pure breeding favours the ‘all-round’ type of animal, the optimum for a cross-bred animal might be completely different.

#### FUNCTIONALITY

Simmentalers are not just bred for the mere sake of breeding cattle, but to produce breeding animals, beef and by-products that make a profit.

The Simmentaler’s beef production has improved a lot during the last few decades. However, some milk production traits, (udders and femininity) deteriorated. So the improvement of production traits must not limit the



*Jan van Dyk*

**ABOVE:**  
Heifers of  
Willem de Waal  
& Sons, Locheim  
Simmentaler  
Stud,  
Moorreesburg.  
JAN VAN DYK

animal's functionality (locomotion, feed intake, udder size, extreme double muscling).

Experience from traditional rural production systems and environments such as extensive grazing on high mountain grassland and pasture that require adaptability, robustness and type must be included in breeding decisions. These can be early indicators of undesirable developments in breeding.

The Simmentaler should be able to adapt to a whole range of production systems including ranching, dairy and zero grazing/TMR systems) without losing its traits for functionality and type.

## HEALTH AND FERTILITY

The most important requirements for any cattle are health and

fertility. Only healthy cows with good fertility are suitable for the production of healthy food.

Natural robustness and hardiness are pre-requisites if the animals are to adapt to extreme climates and sub-optimal conditions.

Due to the increasing demand for Simmentaler cattle, the inter-calving period has dropped to 365 days. These small changes together lead to a higher profit: higher prices for bull calves, lower veterinary costs, a higher price for culled cows, greater fertility, more valuable calves produced per year and, above all, higher milk production.

## NATURALLY POLLED ANIMALS

It is up to the farmer to decide whether to dehorn cattle. Since many farmers wish to farm with cattle without horns, but want to

eliminate the dehorning process, breeders can breed polled cattle in future.

The term 'natural polledness' was created by Dutch Simmentaler breeders and describes the fact that the gene for polling consists of two alleles in which the allele for polledness is dominant over the allele for horns.

Unfortunately, during the last decades, many naturally polled animals were culled in the mistaken belief that these animals had a weaker constitution. In the future, Bavarian Genetics hopes to offer a wider range of polled bulls.

## PRODUCT QUALITY

Unfortunately our knowledge about the quality characteristics of Simmentaler beef and milk (such as a higher CLA content) is still very limited.

However, milk was tested for its Kappa-Casein type

and beef was tested for marbling and tenderness. This product differentiation does not find much favour with the big supermarket chains – for them beef is beef and milk is milk, so they don't have to pay more for high quality products.

Tests done in Germany show that products from Simmentaler cattle have superior quality, so products should realise a better price.

Genomic selection is a big challenge for all those involved in breeding and artificial insemination.

Bavarian Genetics will not change its focus on dual purpose in the long term. Dual purpose is not lip service, but the base of its thinking, actions and success.

- Contact the Simmentaler and Simbra Cattle Breeders' Society of SA on 051 446 05 80/05 82, email [info@simmentaler.org](mailto:info@simmentaler.org) or visit [www.simmentaler.co.za](http://www.simmentaler.co.za)