

## Performance testing of Swedish Beef Bulls

*Swedish Performance Testing of Beef Breeds is a company involved in performance testing and the development of breeding evaluation of the Swedish beef cattle.*

### **Owner**

Swedish Performance Testing of Beef Breeds is a company owned by NAB (Nordic Breeding Association of Beef Breeds), Viking Genetics (AI Company), Scan AB and Svenska Avelspoolen AB (Swedish slaughter plants).



### **Performance testing**

Every year about 170 bulls are put to test at our station in Gunnarp near Hörby in the south of Sweden. The bulls are born from 1st of January to 15th of April and enter the station in August. After an adjustment period the test starts in September and runs for 154 days. The bulls are weighed every second week and the result is published at our webpage.

Angus, Blonde d'Aquitaine, Charolais, Hereford, Limousin and Simmental bulls are evaluated. The breeder owns the bull during the whole period. The Swedish breed associations are involved to decide which bulls should enter each year. After finished testing the bulls are sold at an auction in the end of March.

### **Feeding**

The bulls are fed a TMR ad lib. The TMR is made of silage and concentrate. Three different ratios are fed. Angus bulls are fed a low concentrate diet, Charolais, Hereford and Simmental bulls are fed a "Standard diet" while Blonde d'Aquitaine and Limousin bulls are fed a high concentrate diet. Depending on the quality of the silage there is sometimes straw added to the TMR.

### **Health**

The bulls are inspected by a veterinarian at the farm before they are sent to the testing station. The station veterinarian examines the bulls at arrival to the station and continuously during the testing period. At the end of the test they are thoroughly checked again. Severe implications result in denied entrance to the auction and less severe implications are viewed in a protocol at the auction day.

## ***Registered traits***

### Growth

Daily gain is an important trait for the beef producer and the bulls are weighed every second week. After the test a growth index (T-tal) is calculated for bulls within the same breed and year. Index above 103 indicates growth above average.

### Fertility

The fertility of a breeding bull is of course crucial and therefore the bull's testicles and epididymis are thoroughly examined both as they enter and as they end the test period. The scrotal circumference is measured at the end of the test period. This gives a good indication on the expected fertility of the bull. Bulls with too small scrotal circumference or otherwise abnormal testicles or epididymis are not sold at the auction.

### Hooves

Good hooves are correlated to the longevity for a breeding bull and increasing emphasis is therefore put on this trait. The status of the hooves is registered during trimming after the test period. The results are converted into a hoof score on a 10 grade scale, score 10 represents hooves without any registered faults. Only bulls with score 5 or higher can enter the auction.

### Linear Conformation Score

A good conformation is important both for function and production, it is recorded at the end of the test period before the hooves are trimmed. Many traits are registered for hooves, legs, muscle and body.

### Docility

Calm cattle that are easy to handle is important and therefore this trait is monitored during the test period and bulls with poor temperament are slaughtered.

## ***Research & Development***

Swedish Performance Testing of Beef Breeds is involved in research and development in order to obtain increased precision in performance testing and to support the Swedish beef production. This work is done in cooperation with SLU (Swedish University of Agriculture) and Svensk Mjök (Swedish Dairy Association).

Recently Swedish Performance Testing of Beef Breeds has decided to evaluate how genetic selection can be implemented in Swedish beef breeding. The possibilities with genetic selection will be studied in a project where material from the bulls at the testing station will be used to increase our knowledge on how use this relatively new breeding tool.

### ***AI bulls***

The best bulls within each breed are bought by Viking Genetics. Semen is collected and sold both to beef and dairy herds in Sweden and abroad. The AI bulls are sold at the spring auction when they are two years old.

### ***Auction***

Approved bulls are sold at an auction in March. In order to enter the auction they must meet the official standard regarding growth (T-tal  $\geq 100$ ), testicles, hooves ( $\geq 5$ ) and conformation ( $\geq 75$ ). The breed associations can set higher standards if they wish. Every year some 80-90 yearling bulls are sold and most of them are bought by pure bred herds. They are high up in the breed pyramid and their offspring pass their well tested genetics down to the cross breed population which is the base in the Swedish beef cattle production.

