Translated article from the Jubilee book, *Jubilæumsbog, Landsforeningen for Belgisk Blåhvidt Kvæg I Danmark, 1979-2004*, p. 25-27

Belgian Blue sires and dairy cows – a questionnaire

By *Mogens Stendal*, Senior Advisor for beef breeds in Denmark, 1981/86

From the national Danish Cattle Database it appeared that 88 milk producers during the latest 12 months (2003/04) had used semen of Belgian Blue sires for at least ten inseminations.

We asked the farmers to participate in a questionnaire in order to get to know their experience using semen of Belgian Blue sires and their opinion on Belgian Blue crossbreds compared to pure animals in the herd, including the economy of production.

On a scale from 1 to 5 we asked the farmers to evaluate pregnancy, calving, the calves' manner and the economy from producing Belgian Blue crossbreds. "3" is average and expresses "same level as pure animals" in the herd in question.

We also asked the farmer to mention the three biggest advantages from using Belgian Blue semen, and the advantages/disadvantages from the crossbreds that consequently were born (table 2). Furthermore we asked how much the farmer was willing to pay extra for sexed semen that every time would result in a crossbred bull calf.

Positive reports and no disadvantages
In total 61 per cent of the questionnaire forms were filled in and returned to us. Approx. 15 per cent of the farmers were in the process of stopping milk production. The others were active milk producers with big and high yielding herds: On an average 125 cows producing 675 kg. fat + protein per cow per year. There were a few herds with Danish Red cows, more Jersey herds, but the majority was Holstein herds.

It is interesting to notice that Dutch dairy farmers living in Denmark made up half of those that use a lot of Belgian Blue semen. The reason is probably that many milk producers in The Netherlands inseminate a certain number of their dairy cows with beef semen – mainly from the Belgian Blue and Piemontese breeds. So they are used to such a practice.

Re. the questionnaire all farmers use Belgian Blue semen for cows and only very few use beef semen for heifers.

On an average the active milk producers have used 39 doses of Belgian Blue semen the latest 12 months. If we consider 1.6 inseminations per pregnancy it corresponds to 24 Belgian Blue pregnancies per herd. That means that 20 per cent of the cows per herd are bred to Belgian Blue sires. Milk producer Kjeld Sondrup, Nibe, holds the record. He used 253 doses of Belgian Blue semen and bred the total herd of 140 Holstein cows to Belgian Blue sires, see the article, *Only Belgian Blues are fit for cross breeding*.

The average evaluation appears from table 1.

Table 1. The farmers' average evaluation per trait / statement

Farmers' experience of the influence of Belgian Blue pregnancies and of Belgian Blue crossbreds		1	2	"3" is ave. i.e. as "others" 3	4	5	
Yield, current lactation	*Low*			2.9			*High*
Yield, next lactation	*Low*			2.9			*High*
Calving process (cows)	*Difficult*				3.3		*Easy*
Calf mortality (cows)	*High*				3.6		*Low*
Calves' willingness to drink	*Bad*				3.7		*Good*
Calves' temperament	*Bad*					4.1	*Calm*
Calves' feed consumption	*High*				3.4		*Low*
Total economy	*Bad*					4.4	*Good*

– The farmers found no disadvantage from using Belgian Blue semen. That was the opinion from 67 per cent of the farmers. Nine per cent felt that a Belgian Blue calving was more difficult than a pure calving in the herd.

No influence on yield

Danish investigations in the 1960'ies showed a minor decrease in milk yield, when Jersey cows were bred to Charolais sires. Far the most farmers in the current questionnaire did not feel that the Belgian Blue pregnancy influenced the cows' yield – neither during the lactation when the cow was pregnant with the crossbred calf nor during the subsequent lactation. Both statements had the score 2.9.

Easy to get pregnant – easy calving

It is interesting that 13 per cent said that the cows more easily got pregnant when semen from a Belgian Blue sire was used. A few said that the gestation period was a little longer than normal.

On an average the farmers found easier calving from Belgian Blue crossbreds compared to pure dairy calving –score 3.3, and that calf mortality was lower, sore 3.6. Furthermore, 33 per cent emphasized easy calving as an advantage from using Belgian Blue semen – though nine per cent found calving a little more difficult.

Willing to drink – calm temperament

On an average the crossbred baby calves were easier to learn to drink – score 3.7 and 17 per cent of the farmers emphasized the calves' eagerness as far as drinking milk was concerned. More than 25 per cent of the farmers emphasized the calves' calm temperament – score 4.1.

– "They're simply affectionate" said one of the farmers about the Belgian Blue crossbreds.

Roan colour preferred

More than ten per cent of the farmers liked the calves' colour and when the calves were suppose to be sold for fattening more farmers emphasized the importance of roan colour that proves the calf to be a Belgian Blue crossbred. So, may be the Danish breed society, who is responsible for the availability of genetically superior semen for AI in Denmark, should prioritize white and roan bulls, when it selects sires for semen production?

Almost 75 per cent of the farmers sold the crossbreds as baby calves. 13 per cent of the farmers sold some of the calves and kept the rest for fattening. Normally they sold the male calves and kept the females as they found the price for heifers too low. Approx. 12 per cent of the farmers kept all calves for fattening. A few farmers kept the calves till the age of five to six months. They found that crossbred calves at that time were easy to take over for the buyer – and the farmer got a better price.

Higher profit – advantage number one

We know from the performance testing of Belgian Blue bulls that their feed conversion generally speaking is better than other breeds. The score of 3.4 for feed consumption seems to confirm this.

Almost half the farmers found the economy of production as an advantage of Belgian Blue crossbreds – a statement that was emphasized by the high score, 4.4. Other advantages were mentioned: 24 per cent pointed out the high score for carcass shape (EUROP), 20 per cent pointed out the high daily gain and nine per cent mentioned the calves' robustness. All these traits are important in an effective beef production.

Table 2. The biggest advantages of breeding dairy cows with Belgian Blue semen and advantages of the crossbred calves

Priority	Per cent	Trait
1	48	The production economy
2	33	Easy calving
3	26	Calm temperament
4	24	High score of the shape of carcass (EUROP)
5	20	High daily gain
6	17	Calves' willingness to drink
7	13	Higher conception rate
8	11	Beautiful calves (colour)
9	9	Robust calves

Interest for sexed semen

The farmer gets higher prices for the crossbred bull calves and they are easier to sell. When sexed semen is used you are pretty sure to have bull calves every time – if that's what you wish. Sexed semen is more expensive that regular semen. But how much is the dairy farmer prepared to pay for semen on top of the normal price? We asked the farmers and the answers from 57 per cent, who answered the question appears in table 3.

Table 3. Most dairy farmers are prepared to pay extra for sexed semen

Additional price for sexed semen	% of the dairy producers
Nothing	26
+ 50 per cent	41
+ 100 per cent	13
More than 100 per cent	10

Almost 25 per cent of the farmers were willing to pay double the regular semen price or more for sexed semen. A similar number of farmers would only pay the normal semen price for sexed semen. To some farmers normal conception rate is a condition for an additional price for sexed semen.