

CROSS BREEDING



Crossbreeding is often seen as a quick fix solution which will put right all the problems in one go but, if anything, more thought needs to be put into breeding for crossbreds than it does for breeding pure. Why? Well, due to the effects of hybrid vigour, the first cross of any two breeds is usually very successful but, once you have that first cross on the ground, you are then going to have to consider how to breed it next. Do you cross again, do you backcross to a Holstein or do you try three way crosses?

Therefore, before you start crossbreeding, you need to know where you are going, long term, and what type of cow you want to end up with and then choose a suitable breed to provide that.

Many producers are now looking to crossbreeding in an attempt to overcome fertility and longevity problems in particular, in their existing cattle, and there are several breeds currently being touted as the answers to their prayers.

When looking at the various options available there are some important points to consider:

The viability of a breed. Its no use choosing a breed for crossbreeding, only to find out that there are only a couple of bloodlines or that there is very little choice of sires available.

Is the resultant crossbred going to fit into your management system without causing problems? Are they going to cope with your cubicles? Will they fit in the parlour alongside the rest of your cows? Will they have the same dietary requirements? Will you be able to manage the youngstock in the same way as the rest of your heifers as far as bulling age etc is concerned?

Is it a breed that is making good genetic progress in the traits that you are interested in? Remember you are looking to improve things, not take a step backwards.



Quarry Supreme Claret
50% Brown Swiss
12 lactations
110 Tonnes Milk

Cimarron Even Jenny
50% Brown Swiss
12 lactations
117 Tonnes Milk
Calved 13th calf at 14 years 6 months



Cow for all Systems

Crossbreeding is no longer the domain of the farmer on a New Zealand type system. There is also a place for it on farms that wish to graze cattle during the summer, make the most from forage, and yet retain yields of 7-9000kg.

Recent independent research conducted by Pennsylvania State University, in the USA, has shown Brown Swiss crossbreds to be a viable, economical alternative to pure Holsteins. Results show similar production levels, but the Brown Swiss crossbreds combined this with higher fat and protein yields, lower cell counts and better fertility. This is borne out here in the UK, where Brown Swiss are the No 2 breed for milk yield with a breed average of over 7400kg, second only to the Holstein.

The breed has been used for crossbreeding in the UK for around 20 years and, as a result, has a long established, and proven, track record on UK farms.

Being strong, capacious animals they have excellent foraging ability and good forage conversion. They are not a fussy breed and will usually eat whatever is put in front of them.

They are recognised for their excellent legs and feet - in particular, their hard black feet and great locomotion which allows them to walk longer distances, when necessary, with much less of the potential lameness problems seen in some other breeds. Thurls are wide and leg set is straight, giving them a far more solid, stable base which makes them far less likely to 'do the splits'. Feet are hard & black—better able to stand up to long periods on concrete and less prone to damage.

Being more tolerant of extreme temperatures, they will make the most of a grazing system by continuing to graze whatever the weather.

Incidence of LDA's and milk fever are rare in Brown Swiss meaning lower vet bills, less 'down time' for the cow, and lower labour requirements.

Lactations are flatter, which not only takes pressure off the udder, but can also aid fertility as the cow is not under such stress at the start of her lactation—the time when she is expected to conceive as well.

Brown Swiss are easy calving, which lends itself to a stress free start to a lactation and less of the associated costs and problems that difficult calvings can cause. Most calvings are also unassisted, so less stress on the cowman too!

Mastitis resistance is greater in Brown Swiss. The average SCC for Brown Swiss is significantly lower than the Holstein. On going trials are showing the immune system of Brown Swiss to be far superior to that of the Holstein, making them more able to cope with disease etc.

The temperament of Brown Swiss is renowned. They are docile cattle, easy to work with and handle.

Finally, at the end of her productive life, the Brown Swiss cow is able to lay down meat quickly making her a quality and profitable cull.

All of this adds up to a robust, dairy cow with the ability to maintain yield levels without sacrificing health or fertility, and increase those all important bottom line profits.

NMR Results 2010

BREED	MILK KG	FAT %	PROT %	CELL COUNT	CALVING INT
Holstein	8432	3.88	3.18	206	428
Jersey	5744	5.21	3.80	185	411
Ayrshire	6640	4.03	3.30	175	418
Friesian	6727	4.05	3.29	185	411
Guernsey	5834	4.77	3.54	218	421
Dairy Shorthorn	6079	3.77	3.26	176	397
BROWN SWISS	7431	4.02	3.36	168	413
Montbeliarde	6820	3.80	3.34	183	397
MRI	6373	3.99	3.40	211	406



Treluggan Supreme Twinkle 441
50% Brown Swiss
In 6th lactation
50 Tonne Milk
Still milking

Three Way Crossing

Many farmers are taking crossbreeding a step further and using a third breed to create a three way cross and retain some of the benefits of hybrid vigour, so how would Brown Swiss fit into this sort of breeding programme?

There are many different examples of three way crossing out there, with various breeds being used.

Using Brown Swiss for the first cross will add strength and width, to produce a more robust, longer lasting cow capable of self maintenance to a large degree. Legs, feet and locomotion will be improved, as will health traits such as mastitis incidence, lameness etc. and levels of fat & protein—All whilst maintaining yield levels. The Brown Swiss is a pure breed with no Holstein blood, so hybrid vigour will be maximized. There is also a wide diversity of bloodlines available allowing farmers to choose the type of animal that they require to suit their system.

The Next Step

Brown Swiss semen can be readily obtained from : Alta, Avoncroft, Cogent, Future Genetics, Genus, Semex and World Wide Sires, providing a wide choice of bulls from around the globe.

There are also official UK production proofs for Brown Swiss and these can be obtained from Dairy Co or viewed on their website www.dairycobreeding.org.uk

BROWN SWISS CATTLE SOCIETY (UK)

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