

Health, nutrition and genetics combine to increase efficiency

Harri Parri, Crugeran, Pwllheli, Gwynedd

Hybu Cig Cymru
Meat Promotion Wales



Farm Facts:

725 acres across three farms, Crugeran, Bodnithoedd and Maesog; includes a herd of 210 suckler/breeding stabiliser cattle with followers; one of the first herds of stabiliser cattle in the UK introduced around 1999. The farm also has a sheep enterprise with a flock of 320 Lley and 550 Lley X NZ Suffolk ewes. The farm has also installed a 50kW wind turbine.

Many suckler systems in Wales are based on genetics from the dairy industry and this was true of Crugeran in the 90's. However, as the breeding focus of dairy cows has been predominantly for milk yield this has had a detrimental effect on other traits important to the beef suckler system. Suddenly Mr Richard Parry, his wife Rhian Parry and his son Mr Harri Parri found that their herd, of mainly Friesian x Limousins, was changing – and not in a good way. 'For years our suckler herd was based on Dairy crosses but over time it became clear the older cows were out-performing the heifers coming in and this shouldn't be the case. A herd's performance needs to steadily improve over time in order to be sustainable' comments Mr Harri Parri.

The family felt a restructure of the business model was necessary in order to progress. Their livestock farming philosophy is based on three key factors; Health, Nutrition and Genetics. A high health status for the herd and flock incorporated with informed grassland management provides a platform for the right genetics to thrive. Estimated Breeding Values (EBVs) are important in selecting the right animals for breeding that will continuously improve the overall herd and flock performance.

Visual monitoring was not enough and so Mr Parry sought out an innovative breeding programme that could provide the basis of an improved and more profitable suckler system. Through copious research they discovered the Stabiliser; Stabilisers in the UK is run by the Beef Improvement Group Ltd as a company. They coordinate the breeding of 90 breeders with 10,000 recorded cows. It is a mandatory requirement for all Stabiliser Multiplier herds to performance record.

Their focus is on superior maternal traits to increase kg of meat sold per hectare with big herds all across the UK.

The average Stabiliser herd in the UK is 150+ compared with the average suckler herd in Wales being 20 -30. Genetic gains can be made much faster with big herds especially when they are coordinated. Also with yearly imports of new bloodlines through embryos, the scale and influence of the American programme can be added to the UK genetics. 'The American beef industry is at least 15 years ahead of where we are in Wales and learning from their work is important' comments Mr Parri.

Since the introduction of the Stabiliser genetics the herd has seen a 30% increase in the amount of calves born from the same number of cows. 'Calving spread is a key factor that has a knock-on effect on all aspects of the system including, calving interval, and weaning dates, finishing and overall production efficiency. This is why 90% of our herd will calve within the first two cycles' emphasises Mr Parri.



'A high health status for the herd and flock incorporated with informed grassland management provides a platform for the right genetics to thrive'

Health, nutrition and genetics combine to increase efficiency

Harri Parri, Crugeran, Pwllheli, Gwynedd

Hybu Cig Cymru
Meat Promotion Wales



The herd calve in two blocks; 120 calve in 9 weeks from mid March through until May and then a further 90 calve for 6 weeks from Mid-June until end-July. Tight calving means the farm is able to carry more cows. The half of the herd that isn't rearing can be kept on restricted land whilst the other half is able to run with the bull on more grass. Running the herd as two groups also enables the bulls to be used more efficiently by producing more calves per year. The majority of calves are weaned at 170 days (~6 months); cows that are to be sold/culled are weaned at 4 months.

| Suckler Herd Gains | 1996 Limx Holstein | | 2015 Stabiliser | |
|------------------------|--------------------|--------|-----------------|--------|
| | Spring | Summer | Spring | Summer |
| Calving | | | | |
| Barren cows % | 14 | 16 | 3 | 13 |
| Calves born alive % | 77 | 80 | 97 | 90 |
| Calves reared % | 74 | 75 | 96 | 90 |
| Bulling period (weeks) | 12 | 12 | 9 | 6 |

Before weaning, bull calves are expected to perform at around 1.3Kg Daily live weight gain (DLWG) and heifer calves at 1.2kg DLWG. Spring born calves are not creep fed prior to weaning but summer born bull calves receive creep at housing and are provided with adjoining housing in order to improve the weaning process. After weaning heifers and bull calves are separated and are given different diets. The bulls are pushed harder to achieve 1.8Kg DLWG whilst they look to maintain the heifers at around 0.75Kg DLWG.

'Bulls achieve 1.8Kg DLWG after weaning and are finished and sold by 12-14 months'

| Bull Performance | 1996 born CHX | 2004 born STX | 2014 born ST |
|----------------------|---------------|---------------|--------------|
| Live wt kg | 640 | 620 | 640 |
| Dead wt kg | 365 | 341 | 358 |
| KO% | 57 | 55 | 56 |
| Grade | U-3 | R4L | R4L |
| Age (months & weeks) | 15m | 14m 1w | 13m 2w |

The majority of male calves are finished at 12-14 months of age under a contract bull beef scheme with

Morrisons coordinated by BIG Ltd. This gives some guarantee year on year of sale to ensure input costs don't exceed the output potential. Bulls in the top 10% of EBVs are sold for breeding at 14 months old after going through a strict examination of feet, legs, general soundness and fertility testing.

Heifers that meet the breeding criteria are kept, as replacements or to sell on as breeding heifers. They are put to a bull or served by AI when they reach a target weight of around 380-400Kg and calve at 24 months.

Measuring the performance of the herd through continuous weighing, continuously body condition scoring cows, monitoring over-winter forage requirements etc. enables the data to be compared year on year. This means the improvements can be clearly seen and areas that require further improvement can be identified.

'The most effective tool in our arsenal is the cattle weigh-scales; if you aren't collecting and analysing the data you can't see the areas that are improving or need improvement' states Mr Parri

Weighing calves at birth is mandatory within the Signet recording scheme; noting how the calving went can be just as effective when making future breeding decisions.

Health is the key factor essential to the successful performance of the herd. The herd is BVD accredited, risk level 1 for Johne's and is vaccinated for IBR and Leptospirosis.

The farm also utilises new genetics in grassland management and has included the Aber High Sugar grasses in their re-seeding rotation. They do not run a set stocked system but adapt according to conditions as they are seen. Also, due to the herd calving pattern it has freed up land for arable crops such as Barley and Oats which are incorporated in the bull finishing ration as well as providing straw at housing.

The model produced by Mr Parri and his parents is designed for guaranteed improvement in the herd by ensuring the heifer entering the herd will always be better than the cows exiting the herd. It is also important not to focus on one trait in particular and use a balanced approach incorporating many traits which drive overall profit improvement.