

If you are looking to find a forward thinking dairy enthusiast who is committed to the Montbeliarde breed then you'll struggle to find anyone keener than Graham Morton who farms at Simpsons Farm, near Preston in Lancashire.

Graham's late grandfather came to the farm as a tenant in 1950 at the tender age of 17, milking what was initially a commercial Friesian herd. Graham's father who has a strong engineering ilk took over the farm and with his foresight much of the farms infrastructure and fabrication has been modified and improved over the years and there are many innovative features such as a backing gate to the AI stalls which facilitate one person handling stock on the farm. Graham, now the third generation of the Morton family to milk cows at Simpsons Farm, confesses he has had an enthusiasm for dairy cattle from a young age, joining the farm straight from school with no desire to either work elsewhere or attend college

- although he has travelled extensively in both the UK and further afield to see many different farming systems and operations from which he has learnt and furthered his knowledge.

The cow numbers had gradually grown from the 10-15 initial cows of his grandfathers herd to a milking herd of 80 cows in 2000. As a young farmer Graham became disillusioned with the Holstein cows he had on the farm, and felt the Holsteins lacked longevity and first sought to remedy this by reintroducing Friesian bloodlines - however he came to the conclusion that this was a retrospective step and all it did was create small cattle with the same problems. So the next, and as it now appears final stop was with the Montbeliarde breed. In 2007, the farm purchased two pure Montbeliardes as an experiment, with the anticipation that the breed would introduce strength, protein and beef value to his herd. Also in 2007, Graham purchased 100 straws of conventional Monty semen, Rapello and Timor who bred his first crosses, these cattle have served him well, in particular improving the herds strength as well as giving him the vital milk protein he needed. Since then he has continued to use Montbeliarde genetics, with the herd doubling in size in the last three years and they are now milking 220 cows. The Morton's now have a whole spectrum in the herd from the odd remaining Holstein (now less than 20 head), through first, second and third crosses to what are now fourth successive Monty bred crosses, and ultimately

Although undergoing recent expansion, Graham admits he is ruthless when it comes to selectively culling and is keen to continue improvement. He now only uses sexed Montbeliarde semen on as many cows and heifers as possible, using Belgian Blue on repeats and an Aberdeen Angus sweeper bull. With milk from the farm sold on an Arla manufacturing contract to Tesco's there is no doubt the Monty breed influence has assisted components, and the herd which in 2016 included 38% heifers has a very impressive 9500kg herd average at 4.25% fat and 3.65% protein. The herds annual milk production totals 2.1 million litres and with the introduction of the Montbeliarde breed, Graham states that certainly there has been no loss of milk volume. Graham is keen to genomically test his female youngstock at the earliest opportunity, and is confident in the cost implications being easily justified by the improved components of

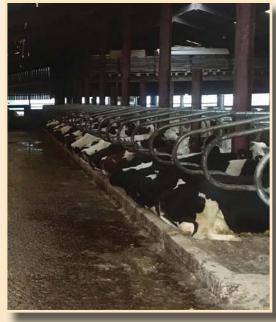


TOP: Ten years on from Graham first purchasing two pure Montbeliardes, the herd now features a mix of first up to fourth generation crosses.

BOTTOM: The cows are comfortable in the sand cubicles with SCC of the herd just 120.

> his milk produced in the future, by being able to identify his most suitable replacements on this parameter alone. Just one example of the forward thinking nature of this farm.

Other Key Performance Indicators on the farm make just as interesting reading, none more so than the fertility angle. As mentioned the farm uses entirely sexed semen with a mere 1.5 straws per conception, with two chances to hold to sexed semen before going to beef. The Silent Herdsman programme is used as an aid to heat detection, and all



cows which suit the system at Simpsons farm.



cows are jabbed with Receptal post service to prevent repeat services and also as the farm has found it is prone to late ovulation in its herd. Cows are regularly bred from 42 days post calving and this along with great conception rates result in a mere 362 day calving interval, which Graham is convinced he can reduce yet further as he strongly believes calving interval is a major key to profitability. Fortnightly vet visits maintain the fertility momentum. It's no secret that Montbeliardes calve easily with few problems, and although Graham found the size of some of his first crosses particularly large, the CCTV cameras installed in the calving boxes a few years ago have now become obsolete with the Monty influence. Across the herd, Graham is using a variety of "grazing-type" sires such as Crasat, Elastar and Hummer in order to maintain a well-balanced, efficient cow, with good udders, legs and feet and excellent components

Calf rearing is another area which has seen major improvements in recent years on the farm, with not all the improvements merely attributed to the Monty influence. Until recently Amy, Graham's wife was responsible for calf feeding and rearing, but they welcomed a baby girl into the world in November 2016, so Amy is on 'alleged' maternity leave. All calves are guaranteed to receive a minimum of 7.5 litres of colostrum within the first 24 hours of life, to ensure the best possible start. After a few days the calves are reared on milk replacer through automatic feeders and are part of an accelerated weaning programme using AB Neo's product Axcelera-C, which sees calves weaned early at 35 days of age. Whilst getting the milk pellets calves are also fed the cows milking ration TMR from a few days of age and starter pellets and the calves are full of vitality and bloom, with big savings on milk replacer input costs. The beef cross calves are generally sold from the farm at between two and three months of age, with all the females up until now taken through as replacements, aiding the herd expansion, so currently there are 160 followers on the farm. These up until now are first calved aged between 22 and 26 months, but it is Grahams expectation that this will be more routinely nearer 22 months going forward. Age at service however is not the predetermining factor, more emphasis is put on weight at first service.

Which brings us around to another major component of the system at Simpsons farm, and that is nutrition and feed conversion and efficiency, something Graham and Amy are very passionate about. This farms propensity for innovation is demonstrated by the Delaval Automatic Weighing System which is an integrated part of the handling system that all cows pass over twice a day as they exit the 20/40 11 year old parlour on their way back to sand cubicles (herd SCC only 120). The weigh scales were partially grant funded and are an integral part of how Graham and Amy feed their cows as well as helping to fulfil an







TOP: Graham and Amy with their baby daughter Olivia, amongst the milking herd at Simpsons farm. **MIDDLE:** The first crosses from 2011 are all still on the farm today.

BOTTOM: The cows are weighed twice a day as they pass through the race, with the technology recording the cows average daily weight and calculating Body Condition Score from the information.

Graham Morton - Simpsons Farm



element of their Tesco's milk contract requirements. The scales enables Graham to monitor every cow, enabling him to prevent cows losing condition as opposed to traditional observed Body Condition Score which only identifies issues once cows have lost condition, by which time it is too late. Amy is responsible for the technological wizardry and wherewithal of an Excel spreadsheet with formulas which takes each cows daily average weight converts this to a Body Condition Score along with other influencing factors, for example age and pregnancy status, to then calculate the required in parlour feed rate in order to maximise yield and maintain condition in conjunction with a fairly stable TMR ration. The milking cow TMR includes 6kg whole crop wheat (65% DM), 6kg maize (28% DM) and 20kg grass silage(31% DM), 1kg molasses, 6kg caustic wheat and 4.5kg blend (which itself is 35% protein and has soya, rape, palm kernel, soya hulls,

and amino pro as components). The TMR is as Graham says fairly potent and aids milk components but his milk contract makes the expense justifiable accounting for circa 2-3ppl. The feeding system's efficiency is also marked by the fact that only 35% of the milking herd actually receive an in parlour feed supplement. Of course, having a 362 day calving interval does not give many cows in the herd chance to get fat either from the TMR ration. Graham also prepares two additional TMR mixes for the dry cows and bulling and in calf heifers.

Cow number 79 is testament to this farm as the herd's highest producer; she is sired by Rapello and is from a Holstein dam who was sired by Alta Wildman. So far line number 79 has a lifetime yield of 58,485 in her four completed lactations, having given 13,750 litres in her last 302 day lactation. There are many other examples on the farm of cows performing like this. While Graham says it will take ten years at least of the Montbeliarde breed milking on the farm to really measure their worth and potential, he hopes cows making six lactations can be his benchmark of the breed affording him the

longevity he craves. Graham's focus as previously mentioned is to breed a smaller more efficient cow as he strives to breed 50 litre cows that weigh in at circa 550kg, although a negative, he accepts is that the cull cow premium often associated with the breed is not as great in his case, but his approach is that a cow is only dead once and productivity

is more important!

The farm comprises of 200 acres owned and 100 acres rented with an additional 45 acres of whole crop grown on contract. This North West England commercial crossbred herd can only be described as progressive, with Graham's mindset very open and he has no qualms about crossing to other alternative breeds at some point in the future, but at the moment he is confident no other breed can offer him the same levels of milk and components as the Montbeliardes, together



with the strength and robustness. He and the family are forging ahead to improve and modify efficiency. On the day of my visit new concrete troughs were being moved into the main cow shed which has had new cubicles and sand bedding added over the last twelve months. The new concrete troughs will improve feed space in an effort to increase feed intake and furthermore produce more milk. Further improvements in fertility and forays into genomic testing may make this farm a feature to be updated in the future as progress continues....



TOP: Just one example of the tightness of udder attachment the Monty cross has on offer. BOTTOM: The strength of the calves at Simpsons farm, sexed Montbeliarde semen is used on the cows and heifers, then British Blue for repeats and an Angus bull to sweep up.