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CogentBEEF

A PROVEN BEEF VALUE PROGRAMME FOR TOMORROW'S CONSUMER

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Supply chain optimisation from the experts

One of the world's largest international breeding businesses

Work With Us

LEADING THE WORLD

At Cogent Breeding we combine the best genetics developed through our own pioneering UK breeding and testing programme with the very best internationally sourced bulls.

Cogent was the pioneer of sexed semen technology and we continue our work today to improve the process, research and development of new technologies, which will aid the modern farming business.

It was after extensive research and development that Cogent became the first breeding company in the world to offer sexed semen commercially and our sexed semen has now been successfully used on farm since 1999.

We offer a complete range of solutions to deliver improvement on-farm and strive to bring innovation to breeding through our selection of world class sires, genomic testing services, mating programmes and the leading sexed semen product on the market - SexedULTRA 4M.

CogentBEEF

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The Cogent Beef programme was designed to address the ever-increasing demand of using beef semen in the dairy herd, highlighting the importance of providing consistent genetics that are repeatable.

Cogent has designed the bespoke Cogent Breeding Index (CBI) which aims to highlight to dairy farmers the benefits that individual beef sires can bring to their dairy production system. Whether that is through calving ease, short gestation length, low birth weights or overall performance of the calf, these traits can benefit sales into integrated supply chains or even into calf markets.

The main goal of the Cogent Beef Breeding Programme is to ensure selection of bulls that can perform in any system, that is why Cogent has partnered with some of the most forward thinking, progressive beef herds in the UK. Working with breeders that implement high herd health plans ensures bulls selected for the programme are free from all diseases such as IBR, BVD, Lepto and Johne's before entering the EU facility. By utilising advanced breeding technologies, Cogent can create multiple pregnancies from programme leading males and females to ensure they are bringing the correct genetics into the stud.

Cogent boasts a state-of-the-art bull stud providing high performance, high quality semen to both UK and international markets. The production facility aims to produce a disease-free product that allows customers to enjoy the benefits of the beef genetics programme. The quality of the beef semen and advancements in technology and sorting procedures allows Cogent to provide male sexed semen with greater than 90% gender purity, and quality control parameters to match the sexedULTRA 4M offering.

Building transparency, confidence, and value for tomorrow's consumer.

PIONEERING

At Cogent we are pioneers of the world's first sex sorted semen and we continue our research and development to make further product advancements.

PROVEN

We achieve proven results through our dedicated Cogent Beef Index and Visions testing programme. Only the best young bulls are selected for the programme with the dairy farmer in mind.

VALUE

Cogent Beef on Dairy sires have been selected based on our very own financial indexes aimed at giving dairy farmers valuable beef calves.

THE BEEF BREEDING PROGRAMME

Cogent Breeding combines the best of British genetics developed through our own pioneering UK breeding and testing programme with the very best internationally sourced bulls.

Operating out of the UK's largest bull stud and based on the commercial requirements of today's dairy farmer, we have successfully developed a beef breeding programme founded on production, type and reliability. The Aberdeen Angus breed has been celebrated as the world's leader in the cattle breeding industry when looking for top quality output and manageable cattle. While British Blue breeders recognise the importance to the modern commercial beef market, being fine boned, heavily muscled, docile animals with tremendous growth potential, leading to a very high percentage of saleable meat.

Blackhaugh Aberdeen Angus

As the no.1 beef brand in the red meat sector it is no surprise that Andrew Elliot of Blackhaugh selected the Aberdeen Angus as his breed of choice.

Blackhaugh is a hard-upland farm set in over 2,000 acres in the picturesque Scottish Borders and is farmed by the Elliot family in conjunction with the hill farms of Bedshiel, in the Lammermuir hills, and Balnakeil, in north west Sutherland.

The Blackhaugh herd was founded in 2003 although the Elliots have farmed a herd of pedigree Aberdeen Angus cattle at Balnakeil under the The Cape Wrath prefix since the mid-1920s. The Blackhaugh herd was founded solely with embryos, partly for herd biosecurity but also to access desirable Aberdeen Angus genetics from herds farming on a commercial scale in North America – which has proved popular with numerous Blackhaugh bulls entering AI studs and semen being exported globally.

The first Aberdeen Angus embryos were implanted in 2003 and the herd has grown considerably since then with the two herds currently running approximately 190 pedigree Aberdeen Angus cows. The cows are split with 130 autumn and spring calvers at Blackhaugh and 60 spring calvers at Balnakeil. As well as this there is a herd of non-pedigree cattle at Bedshiel, of which 40 to 50 are presently used as embryo recipients. In the 1980s fashion and economics lead the Elliots to introduce some continental sires but the shift through the 1990s towards a lower input system with reduced labour, allied to Andrew Elliot's experience of purchasing store cattle to feed. This brought the herds full circle back to using solely Aberdeen Angus bulls.

"20 years ago we were crossing Aberdeen Angus females with Shorthorn bulls to breed replacements which were then mostly crossed to Charolais bulls, but in the late 90s I started buying a few hundred store cattle of all breeds to finish annually. "I looked at the performance of the various breeds, and this, data combined with reducing staff numbers, the easier management of the pure-bred Aberdeen Angus cattle at Balnakeil as well as the emerging premium for Aberdeen Angus sired cattle all convinced me of the merit in reverting to solely Aberdeen Angus bulls," explains Andrew.

Hard won experience working with sheep and cattle on upland farms in Scotland, as well as in Australia and New Zealand, has helped Andrew to identify the type of cattle to suit his hill and upland farms – fertile, easy keeping, moderate framed cattle with decent growth.

He says: "Since the switch we have reaped the benefits that the breed has to offer including increased calf vigour, and resistance to UK challenges both climatic and disease related. Their hardiness, ease of calving, fleshing, docility, milkiness and fertility leaves me in no doubt that the switch back to Aberdeen Angus was correct."

> **"WE HAVE REAPED THE BENEFITS THAT THE BREED HAS TO OFFER.**
> **ANDREW ELLIOT**
> **BLACKHAUGH ABERDEEN ANGUS**

Partnering with Cogent

Cogent first approached Blackhaugh in 2016, at a beef conference on feed efficiency and suckler cow production. Since then, the herd has produced a total of eight sires that have graduated into the breeding programme.

The first bull purchased was Blackhaugh Titus – a quiet, thick, easy fleshing bull with good growth who proved to be consistently fertile.

Over the next couple of years, Cogent's Beef Programme Manager Boomer Birch continued to purchase further sires from Blackhaugh before embarking into an embryo partnership. The initial batch of bulls from the embryo transfer programme has now entered the stud and is in production, a further 23 bull calves were born this Spring and in spring 2021 another 50 embryos were implanted.

To breed a successful sire Andrew Elliot believes that consistency of breeding is key and to this end Blackhaugh has consistently selected and bred over several generations for fertile, easy calving, functional, balanced animals.

He says: "Fertility, temperament and calving ease are non-negotiables, and the goal has always been to consistently breed animals which thrive in a real-world commercial environment. Whether that be easily fleshed, hardy cows with good locomotion and udders to thrive on poorer quality pasture, or easy calving, polled bulls which will sire calves with a short gestation length allowing cows to start producing milk and return to service earlier in the dairy industry.

"Experience has convinced me of the merit of rearing breeding animals naturally to promote fertility and longevity and to this end bulls are not forced but are reared solely on grass during the grazing season and a forage based TMR diet during the winter months."

Andrew believes this approach turns out bulls which will consistently breed, not just animals which please farmers, but will also consistently produce a high quality, uniform, branded product which meets retailer specifications.

"Over the last 20 years we have used EBVs heavily in our selection criteria, and I am told that the Blackhaugh and Cape Wrath bulls that have entered the Cogent Beef Programme to date have performed well. The introduction of genomics should enable a higher and faster rate of indentification of bespoke genetics which meet the required criteria for each link in the chain and accelerate progress.

"When genomics is combined with hard data gathered on farm alongside developments in feed efficiencies, I think the best is still to come. I am excited to see the progress achievable over the next several years," says Andrew.

KEY SIRES

- ✓ BLACKHAUGH LORD HIGH DEAL
- ✓ BLACKHAUGH TITUS
- ✓ BLACKHAUGH DIEGO
- ✓ BLACKHAUGH LORD HAM
- ✓ BLACKHAUGH CRACKER
- ✓ BLACKHAUGH LUCAS

"COGENT'S HIGH QUALITY GENETICS AND THEIR HONEST, TRANSPARENT MANNER HAS MADE THIS BUSINESS RELATIONSHIP WORK.

ANDREW ELLIOT
BLACKHAUGH ABERDEEN ANGUS

A selective breeding policy and the future herd

Bull selection is one of the key management decisions for both commercial producers and pedigree breeders alike and obtaining a bull with the correct genetics can have a major impact on profitability.

Breeding lies at the foundation of any beef production system. While herd breeding decisions are just one element of cattle management, selecting superior parents for breeding will also lead to cumulative and permanent gains in herd productivity, profitability, and efficiency. There is no single definition of a good breeding plan. Instead, breeding plans need to be devised to meet the specific requirements of a herd and the target market.

At Cogent we supply a large proportion of semen to markets across the globe. Those markets all have individual needs and look for varying traits when selecting a beef sire.

Two key tools in the selection process are Estimated Breeding Values (EBVs) and Expected Progeny Differences (EPDs).

An EBV is a measurement of genetic potential which can be used to assess a bull's breeding merit for a specific trait. Whereas an EPD is a predictor of the genetic merit of an animal's progeny.

Traits considered by Cogent for breeding pedigree beef bulls include:

CALVING EASE

Look for positive calving ease figures (Top 10% and above in the breed), negative figures for birth weight and a gestation length ideally below 285 days. Choosing a bull with easy calving EBVs can significantly reduce losses from calving difficulties, including the cost of veterinary treatment, poor fertility, and lost milk output. It is possible to choose sires with good calving ease figures alongside excellent growth and carcase trait EBVs.

GROWTH AND CARCASE TRAITS

When breeding beef calves from the dairy herd or buying animals to finish, it is important to think about the growth rates and carcase traits needed so that the finished cattle can hit market specification and produce the best returns. Ideally look for 200, 400 and 600-day growth rates.

IMF (INTRAMUSCULAR FAT)

Intramuscular Fat EBV (%) is an estimate of the genetic difference in the percentage of intramuscular fat at the 12-13th rib site on a 300 kg carcase. Depending on market targets, higher positive values are generally more favourable.

AHDB

The AHDB national beef evaluations provide a set of five estimated breeding values (EBVs) that allow breeders to directly select bulls based on their genetic potential for carcase performance.

These EBVs are generated by combining large volumes of national data from British Cattle Movement Service, processors and breed societies, giving high accuracy figures for bulls that have had progeny slaughtered. For young bulls, EBVs can still be calculated using data from their relatives, such as their parents and grandparents. These figures will become more accurate when their own progeny reach slaughter age. The processor data currently covers 40% of the national kill and almost 3 million carcase records for both purebred and crossbred animals (including dairy-beef crosses) have been used in the latest genetic evaluation (December 2020).

This is the first set of EBVs in beef cattle for traits that farmers are directly paid for, so they are useful to commercial as well as pedigree farmers. They are highly relevant to sires in both the Signature Beef and Beef Impact breeding programmes, with some bulls having the potential to produce a calf that will be much more profitable when put into the beef supply chain. These figures are now also being considered by the industry when selecting sires for inclusion in premium schemes.

The AHDB national beef evaluations are the only multi-breed beef cattle evaluation published in the UK. The EBVs are expressed on two bases, native and continental, so EBVs can be compared between animals of the same breed type, for example between an Aberdeen Angus and a Hereford bull, or between a British Blue and a Charolais bull.

All five traits published have a moderate to high heritability (~40%), so making use of these new EBVs will greatly accelerate improvement in carcase characteristics. However, it is important to consider this new data source alongside other EBVs when selecting individuals for breeding. For example, animals of high carcase merit should not be chosen to the detriment of health and fertility traits such as calving ease.

THE LIMITING FACTOR

The production of these EBVs relies on sire details being recorded on passports to be able to identify genetic links between bulls and recorded progeny. In the latest genetic evaluation run, over 50% of data available from processors was discarded as no sire details were recorded in BCMS. To improve the breadth and accuracy of these breeding values, we encourage all breeders to "Shout about the Sire", and record known sire details for all calves when registering them on BCMS.

The role of the MODERN DAIRY HERD

Approximately 50% of all beef in the UK is a product of the dairy herd, predicted to increase further over the next five years. Improving the quality of these cattle can bring economic benefits to everyone involved in the beef supply chain.

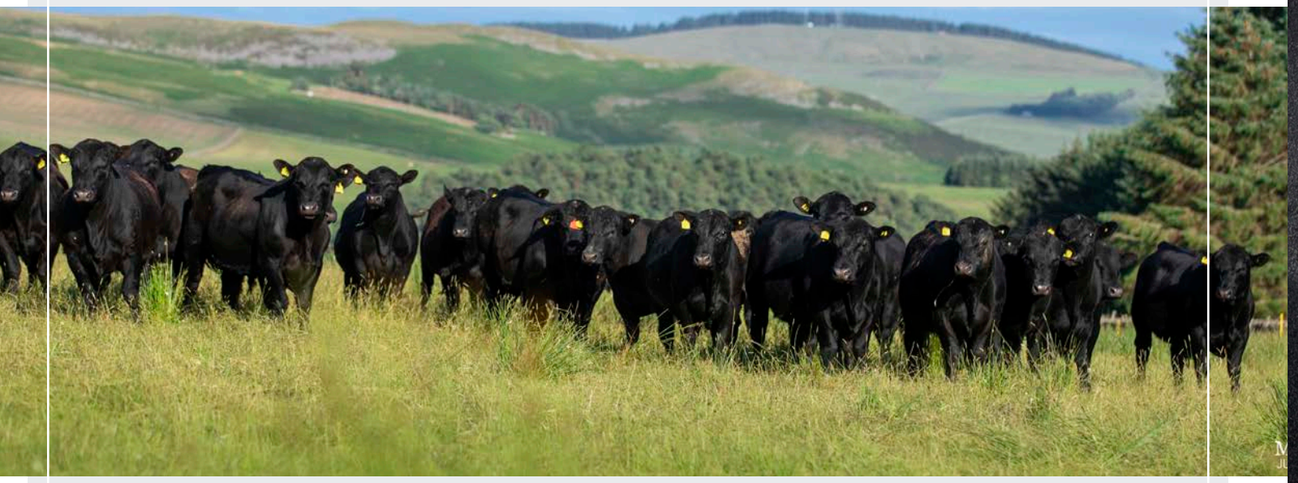
Incorporating superior beef sires into a dairy herd's breeding plan goes hand in hand with the use of new technologies such as sexed semen. These tools enable dairy farmers to breed heifer replacements from their highest genetic merit animals, while using high-value beef sires on the rest of the herd.

Additionally, beef producers need to take a market driven approach, producing finished cattle as cost-effectively as possible to provide maximum financial returns. Across the UK suckler herds using beef cross dairy animals and dairy farms using beef semen on their cows have a variety of markets they supply. While in the past each of those had very different selection criteria, they have now become very similar, rendering beef cross dairy cattle, a product which now suits all markets.

Genetics are a vital tool in enabling the breeder to maximise the full potential of their herd, meeting the requirements of both their production system and market outlet.

Cogent Beef Impact

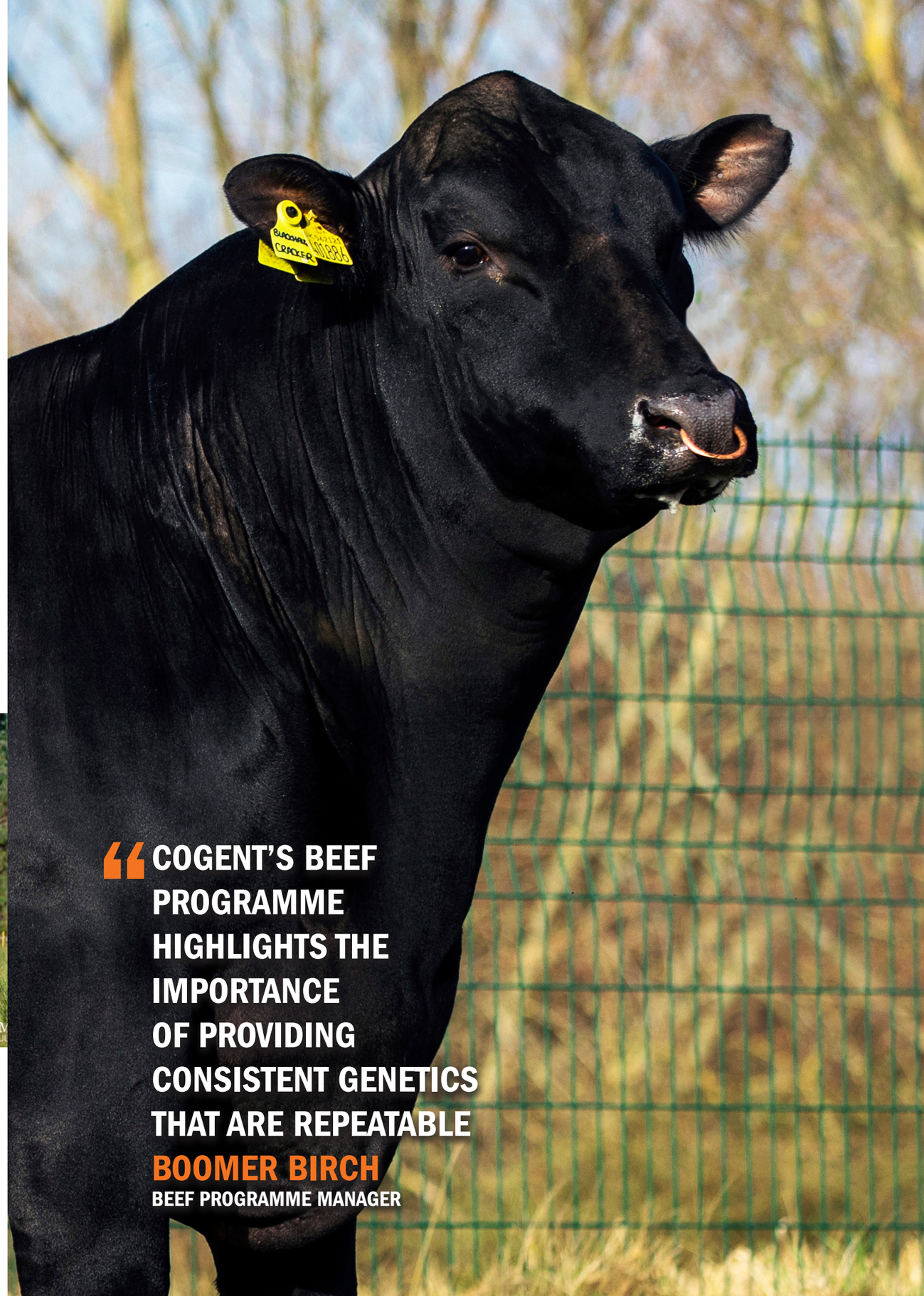
Our Beef on Dairy indexes aim to aid decision making by helping the breeder select the best beef sire for their system.



At Cogent we pride ourselves on compilation of sire and progeny real-time data from which we create a financial index known as the Cogent Breeding Index (CBI). This CBI value is an amalgamation of a production-based index; Market Value Index (MVI) and a management-based index; Ease of Management Index (EMI).

The MVI largely focuses on the economic benefit of using a beef bull within a dairy environment, by combining productive traits such as calf size and quality. Alternatively, the EMI is driven by traits associated with calving such as gestation length, calf vigour and calving difficulty.

The figures are calculated on each individual beef sire and are indicative of the benefits, that the sire can contribute to the next generation when used in a dairy herd. By publishing these figures, we provide the farmer with a monetary value that can be used to predict the benefits of using such genetics within their enterprise.



"COGENT'S BEEF PROGRAMME HIGHLIGHTS THE IMPORTANCE OF PROVIDING CONSISTENT GENETICS THAT ARE REPEATABLE

BOOMER BIRCH
BEEF PROGRAMME MANAGER

Kersey British Blues

The attractive rolling countryside of south Suffolk is home to the Kersey herd of British Blue cattle. Bridges Farm is situated in the parish of Kersey and comprises 850 acres of arable land and permanent pasture.

Chris Partridge is the fifth generation on the family farm at Kersey and works together with his wife, Sarah and the eldest of their four children, Alice. Having completed a degree in agriculture at Nottingham University, Alice is currently broadening her horizons working in the cattle breeding industry in New Zealand. She has a keen interest in livestock and is passionate about the British Blue breed. The herd was established in 1986 after Chris left college and is one of the longest established British Blue herd's in the country.

Attracted by the docility of the British Blue breed coupled with excellent muscling and high killing out percentage, Chris started with two pedigree heifers from the Park Herd and since then the herd has grown exponentially. The breeding aim of the Kersey herd is to produce cattle which are fleshy, long, mobile, well-balanced, fast growing, and capable of calving naturally.

"The British Blue breed has a great potential for both dairy and suckler farms looking for bulls to produce fast growing, high quality slaughter progeny" explains Chris.

The pedigree herd currently consists of 20 British Blue breeding females of different ages. There are also 60 Angus and Simmental-cross commercial sucklers as well as a long-established flock of 80 high index pedigree Suffolk breeding ewes, and eight Blue Texels, all under the Kersey prefix. Livestock are fed home-grown feed, along with arable by-products. The diet includes straw, grass silage, fodder beet, wheat, and barley. Within the Kersey herd the Partridges tend to use British genetics rather than imported, targeting traits for growth rate and overall muscling. Their objective is to breed bigger animals that retain their natural calving ability. Using homebred Kersey bulls on their suckler herd confirms they are achieving their aim as cross-bred British Blue calves are born easily and finished cattle often achieve top prices at Colchester market at around 16 months old.

Homebred bulls are used on the commercial herd of crossbred Simmental cows and are sold for breeding direct from the farm as well as at society sales. Bulls, cows, and heifers are usually available for sale as well as embryos.

The Kersey herd was recognised by AHDB Beef & Lamb as the Most Improved Herd of British Blue cattle in England in 2016. This is the second time they have won the award, first receiving the title in 2011. The award is presented by the AHDB Beef & Lamb Better Returns Programme to the recorded herd that shows the greatest genetic gain for commercial characteristics over a 12-month period.

> **"WE ARE VERY PROUD TO HAVE PRODUCED EIGHT HOMEBRED BULLS CURRENTLY HOUSED BY COGENT CHRIS PARTRIDGE**
>
> **KERSEY BRITISH BLUES**

Partnering with Cogent

Chris Partridge began his relationship with Cogent over six years ago producing bulls for use on the dairy herd. Cogent is particularly interested in their high beef value, white-coated bulls to produce blue calves at crossing.

In the past few years, the Partridge family has sold twenty bulls in total, which has been a welcome addition to the production of bulls for both the suckler and dairy industry.

Blues have been bred at Kersey since 1986 and Kersey Geronimo is one of the greatest bulls produced to date, with semen now in short supply. He was the very first sire to be sold to Cogent from the Kersey herd in 2013. A well-balanced, correct British type of bull bred from a top female line, he combined length and flesh with exceptional performance figures. Bulls from the Kersey herd are also supplied to both suckler herds and dairy farms and females are sold as bulling or in-calf heifers. Embryo transfer has been used in the Kersey herd for many years and they often have embryos available for sale.

The uptake for Kersey semen has been significant, and continues to grow, with product distributed to not only the UK, but also international markets. Countries of export include, Denmark, Spain, Turkey, Canada, Greece, Malaysia, Kenya, Germany, Hungary, Czech, Russia, Thailand, USA, and Australia.

"Over the last 30 years during my time within the breed, the British Blue has improved and developed. This includes the work we have done here at Kersey, producing short gestation, mobile, easy calving, fast growing, quality beef cattle. I like the idea that through our partnership with Cogent, Kersey British Blue bulls are having a positive influence on the beef and dairy industries, both nationally and internationally."

KEY SIRES

- ✓ KERSEY GERONIMO
- ✓ KERSEY KARATE
- ✓ KERSEY KINGPIN
- ✓ KERSEY LINCHPIN
- ✓ KERSEY NIMROD
- ✓ KERSEY LIONHEART

"I LIKE THE IDEA THAT THROUGH OUR PARTNERSHIP WITH COGENT, KERSEY BRITISH BLUE BULLS ARE HAVING A POSITIVE INFLUENCE ON THE BEEF AND DAIRY INDUSTRIES

CHRIS PARTRIDGE
KERSEY BRITISH BLUES

Kelowna British Blues

KEY SIRES

- ✓ KELOWNA JIMNO
- ✓ KELOWNA LARS

Three generations of the Pattinson family have strived to maintain a herd of pedigree British Blue cattle at Kinkry Hill Farm, near Roadhead, Carlisle.

Pic L/R: Son Joe, wife Claire and two daughters Lauren and Kate. Steven Pattinson pictured with 2-week-old calf Rascal sired by Kersey Linchpin.

Steven, together with his wife Claire, son Joe and two daughters Kate and Lauren runs a herd of pedigree British Blues near the picturesque, rural Scottish Borders at Roadhead. The farm runs to 160 acres of grass which is split between the 80-head dairy herd, and 30 British Blue cattle. It was in the early 1980s when Blue semen was used on some of the dairy cows that set the seed for the establishment of the Kelowna herd of British Blues. Keen to establish a pedigree beef herd, Steven and Claire bought their first Blue female in 1996 at Borderway Auction Mart, Carlisle. "We were using the Blue on the dairy herd and the calves were easy to manage, vigorous and showing good growth rates. We had no trouble calving them and they seemed a good complement to the Holstein Friesian cows." says Steven.

Having decided that the British Blue breed was the way forward to produce the kind of cattle the market wanted, Steven and Claire started to look at their cows and to further develop the female side of the herd.

The two had long been admirers of the breed and it was their ease of management, growth rates, and docility, which encouraged them to look closer and start a small foundation herd of pure cows. The commercial aspect of the breed also appealed to the pair, who would see time and time again British Blue calves selling for a premium at market. Almost 25 years on, the Pattinsons have grown the herd through selective breeding and careful purchases. Travelling and heavy involvement with the National British Blue Council, of which Steven is chairman and the Border British Blue Club, of which Claire sits on the board as regional secretary, has enabled the couple to build contacts, visit fellow breeders, and further their knowledge of the breed. Two breeders who have been instrumental in a lot of Steven's breeding practices are Michelle Wilde at Ridge Dean from Soulbry, Milton Keynes and Graham Brindley from Market Drayton, among other greats.

About seven years ago, Steven sold his first British Blue bull to Cogent, Kelowna Jimbo. Kelowna Jimbo is by Bringee Ecstasy out of the homebred cow Kelowna Claire, a Gregmaur Wyllie daughter, going back to Tamhorn Sumo. His easy calving abilities coupled with excellent growth rates have made him a farmer favourite. In recent years a further six Kelowna sires have been purchased by Cogent. Being able to get six homebred bulls into AI for the dairy sector has been particularly gratifying for the Pattinsons and part of their breeding programme is devoted to improving that market.

Steven says: "We are very proud to have produced a total of eight homebred bulls currently housed by Cogent as well as bulls that are working well on commercial suckler and dairy herds throughout the UK".

"Our goal has always been to produce quality British Blue bulls with easy calving abilities, good mobility, fleshing and presence. In the 25 years we have been selling bulls we have earned a reputation within the AI industry, and our partnership with Cogent has allowed dairy farmers to produce that quality, cross bred calf that the commercial supply chain demands" explains Steven.

"To date, Kelowna Lars is my favourite sire to have qualified through the programme. From my favourite cow, he was a direct line from the first British Blue we purchased almost 25 years ago sired by Lawns Dominic.

"With further bulls in the pipeline, we are excited to see what the future brings. Our relationship with Cogent has gone from strength to strength, and it is a real pleasure to see calves being born from our bulls on farms across the UK and in International markets"

Steve Pattinson with calf Rascal sired by Kersey Linchpin

> "PRODUCING QUALITY BRITISH BLUE BULLS WITH EASY CALVING ABILITIES, GOOD MOBILITY, FLESHING AND PRESENCE.
>
> **STEVEN PATTISON**
>
> KELOWNA BRITISH BLUES

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