

Beef Bulletin

Fdition 1



Youngstock Rearing Breed focus: Simmentals **Managing Acidosis with AB Vista Breeding with Cogent**











NEWBIEMAINS SIMMENTALS

NWF Agriculture's Technical Sales Manager Patricia Goldie, husband Jim and her family have a successful herd of pedigree Simmentals. Originally dairy farmers, the family converted to beef, where some routine management practices have stayed in the form of analysis and attention to detail.

Located in Dumfries and Galloway, Newbie Mains is home to 160 pedigree Simmental cows plus followers which calve throughout the year. The farm annually re-seed a quarter of their land, in addition to growing

wholecrop, which is undersown with Italian ryegrass, "a great feed source for the later calvers" says Patricia. The Simmental is the ideal cattle for the Goldie's, the location of the farm being at sea level means that cattle must be able to finish quickly without getting too fat, and animals must withstand the open and harsh environment.

The Goldie's analyse their forage and conduct mineral analysis', which allows them to choose feeds that match homegrown sources and supplement minerals efficiently. This is something which they have maintained from the dairy days, and as Patricia highlighted;

"It is important to know what you have, not only to be able to improve year on year but to feed the stock efficiently".

The system relies heavily on milk from grass; their re-seeding protocol pays off as no creep feed is required to supplement calves at grass. All females are classified where possible, "like the Holsteins" helping to build a visual picture, recording top class and functional animals. Another benefit the family attribute to their reseeding protocol and past dairy experience is age at first calving. All Heifers at Newbie Mains calve down at 2 years of age.

The show cattle are not managed differently to the commercial herd, which helps grow and maintain animals to be functional and "fit for purpose". Bulls are managed in groups of 20 and not fed ad-lib. As a rule of thumb, bulls for the sales will be brought in 3 months prior, where they are fed at either end of the day with an NWF blend which matches the forage and mineral analysis. Patricia says, "this feeding regime helps as bull are going to work, in addition to limiting the risk of acidosis and promotes good feet".

NWF's Olympian Show Mash is used to "great success" at Newbie Mains. Soaked with warm water and given to bulls around 3 weeks before the sales, "The oats and sugar beet pulp works a treat, helping to keep them full" says Jim Goldie. The Olympian Show Mash is also taken and fed to any stock which spends

time away at the shows. With its high levels of oats, sugar beet pulp, mixed flakes and lucerne, it is "extremely palatable" helping to keep cattle looking their best whilst showing away from home.

It was also highlighted that all the calves which are born inside, as a twin, or born from a first calving dam, receive a Renova Bolus at 3 days old. This ensures that calves which are born in slightly stressful circumstances have the best start in life. Patricia believes that "calves born in this situation do better with a bolus than what they do without one".

The team at Newbie Mains have a strict breeding policy, animals which they would not be prepared to use for breeding themselves are sent to slaughter, particularly when trade is good. This is something the Goldie's pride themselves on and a key driver to both gaining, and retaining customers looking for quality breeding stock.

Looking towards the future, Newbie Mains want to maintain numbers and a fresh herd. To do this they will be bringing in new heifers over the next couple of years, which will also give them the ability to continuously improve the genetic pool of the herd.

NWF Agriculture thank Newbie Mains for their knowledgeable insight to their breeding business.



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Rearing Dairy-Beef Calves





Cost is a major factor when rearing beef calves, where the early life period provides huge opportunities to make the most of inputs. This phase is the most efficient period of an animal's life and when their feed to growth conversion is at its highest; from 1kg of calf milk replacer fed, they can gain 900g in body weight.

Sourcing policy

The first week of a calf's life can have a substantial impact on its future health and growth, highlighting the importance of sourcing beef calves carefully, whether direct from farm or market. When sourcing calves it is important to take into consideration the health status of the herd, if calves received adequate colostrum and their disease history. Calves should be alert, bright, show no signs of ill health and have a dry navel, in addition to being of good weight for their age (>7days old).

Arriving on farm

Bought in calves should be quarantined for at least 7 days, especially if calves are from mixed sources. This allows them to be monitored for disease without putting current animals at risk. Only mix bought in calves with groups when the quarantine period is over and if there are no signs of ill health. A vaccination programme should be implemented, liaising with your vet can ensure a comprehensive plan is in place. Avoid all stressful procedures (disbudding and castrating) for the first 7 days as this can promote disease outbreaks as the calf's immune system can become compromised by the stress of the procedures.

During transport and transition from one environment to another, calves can often incur a period of stress and dehydration. To help mitigate the impacts this may have, as well as giving them a well needed "boost", an electrolyte should be given as their first feed on the farm. This also gives time for the abomasum to adapt before transitioning to a new diet and to reduce the digestive upset which can be expected when transitioning bought in calves.

Clean, fresh water and forage should always be available from the moment calves arrive on farm. Calves can drink 4 litres of water for every 1kg of concentrates they eat. Forage (ideally chopped straw) is vital for rumen development and promotes intakes.

Hygiene

Cleanliness and hygiene are critical when rearing calves, especially when calves are exposed to the stress of transportation, a change of routine and new groupings, all of which can increase their susceptibility to disease. Feeding equipment should be thoroughly cleaned with a detergent and boot dips on entry to the calf shed between quarantine and current calves should be used to reduce disease spread.

Milk feeding

Calves should be fed a minimum of 750g of a high-quality calf milk replacer (CMR) per day, gradually increasing to between 0.9-1.2kg a day. The table below shows the recommended minimum calves should be receiving; all NWF milk replacers have a minimum inclusion of 125g of CMR to 875ml of water to make 1 litre, for an enhanced plane of nutrition 150g of CMR to 850ml of water to make 1 litre should be used. Calves should be achieving a minimum of 0.8kg daily live weight gain (DLWG) a day, with the aim of over 1kg depending on desired timeframes and weights.

Feeding Table										
	1Week	2 Week	3 Week	4 Week	5 Week	6 Week	7 Week	8 Week	9 Week	10 Week
	Colostrum							Wea	ning	
Milk Replacer	4 to 5 Litres	5.0 to 5.5 Litres	6 Litres	6 Litres	6 Litres	6 Litres	5 Litres	3 Litres	2 Litres	2 Litres
Calf Starter	100g	150g	200g	500g	800g	1.3kg	1.5kg	1.75kg	2.25kg	2.5kg

Weaning

Weaning is one of the most stressful times for a calf, this transition must be managed carefully to avoid a growth check. Calves should have doubled their birth weight by weaning and must be eating a minimum of 1.0-1.5kg of concentrates for three consecutive days before beginning the weaning process at around 7 weeks of age.

Step down weaning is a less stressful method, which allows the calf to bridge the nutritional gap with solid feed. It is important to make sure that solid feed is as attractive as possible; palatable and replenished daily, as we are asking a calf to be weaned between 8-12 weeks, a lot earlier than the 6-8 months they would do naturally if left on the dam.

NWF Youngstock Team

At NWF Agriculture, we recognise the importance pre-weaning nutrition can have on the future productivity and efficiency of beef calves, and therefore, the future profitability of the farm business. The NWF Youngstock team can provide advice and services ranging from testing colostrum and monitoring growth to devising protocols for dairy and beef herds. With a Cow Signals©, Master trainer in the team we can also host staff training on your farm to promote consistency and good health across your herd.

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Two years ago, Martin and Sophie Cooper with their two young daughters relinquished their National Trust tenancy in the Lake District and moved to a 500-acre farm in the Scottish borders.

The main enterprise at D'Mainholm Farm, Newcastleton is calf rearing and the business is run in partnership with Max & Lynda Howard. Between February and May, 800 bull and heifer calves arrive from 2 grazing herds at Lockerbie and Dundee. Calves are all dairy beef crosses and prove to be resilient and relatively easy to rear. They remain at D'Mainholm Farm for 5 to 6 months, the majority are sold onto a specific buyer for finishing, with the Cooper's keeping 200 to grow and finish for themselves. Calves arrive in weekly lots with re-assurance of having received good levels of colostrum, Martin claims this as being the "most important" procedure for the whole operation to be successful. In the past calves have been blood tested to ensure optimum antibody levels have been provided and absorbed through the dams' colostrum. Calves are fed NWF Ultra Life Skim milk replacer; a lifestart approved 50% Skim powder with 24% Protein, 20% Oil and Greenline additive package, plus ad-lib JPA Yummy Mummy Calf Starter blend and straw.

Calves are housed in a new multi-purpose building, grouped in pens of 100. Twice a day they are ushered from their pens to the unique 24 stall feeding station which Mr and Mrs Cooper designed themselves alongside the Howards. JPA Sales Specialist Frank Armstrong says, "It's amazing how quickly calves learn to enter the stalls, very similar to cows entering a milking parlour".

To make up the milk feed, a large boiler was installed to heat the water to 45°C, Sophie says the milk replacer "smells nice and mixes easily". This is then transported by a taxi behind the quad bike to the feeding stalls where milk is pumped into the teated buckets. The feeding station allows calves to drink individually out

of the teated buckets enabling them to be monitored individually at each feeding, adding to the couple's attention to detail. At the peak of the operation, it takes just 2.5 hours to feed 520 calves and that includes washing all the milk buckets with detergent and water.

On dry sunny days, the older calves are often allowed out into a field, Martin says that "the exercise does them good". At week 6 to 7 calves are moved to once a day feeding, this is important to allow calves to increase their concentrate intake before being fully weaned at week 7 to 8. Once weaned they are turned out into fields and fed 2kgs of JPA 18% Total Rearer nuts by snacker.

Over Frank's long career he has not seen a calf rearing system quite like the one Martin and Sophie are running. "To come from a hill farming background and create such a detailed calf rearing enterprise on such a large scale is a credit to the hard work and dedication of both the Coopers and their business partners. The whole operation is slick and efficient with animal welfare and health at the core."

NWF Agriculture would like to thank Sophie and Martin for sharing information about the family's calf rearing business.









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NWF Traded Products

KEY PRODUCTS FOR YOUR BEEF HERD

KLI PRODUCI	15 FOR YOUR BEEF HERD		
	NWF UltraMin Powdered Minerals 25kg		
UltraMin Suckler Cow	High Vitamin E to boost the immune system and fertility as well as high Phosphorous which is essential for energy metabolism.		
UltraMin Cattle GP	High levels of all vitamins and minerals to suit a wide variety of systems includes Intellibond Copper and Zinc to support fertility and immunity.		
UltraMin Cattle Hi Mag	Contains multiple magnesium sources all of high quality and bioavailability, also formulated with Intellibond Copper to support fertility and immunity during the grazing season.		
UltraMin Intensive Beef	High Vitamin E levels suited to be used with most cereal based diets, helping to reduce the risk of white muscle disease.		
UltraMin Dry Cow	High Vitamin E, Selenium and lodine to boost the immune system an cell repair in the dry period.		
	NWF Mineral Buckets 20kg or 80kg		
Cattle GP	A convenient, highly palatable way of providing balanced minerals and trace elements to achieve optimum health and performance.		
High Mag	Provides three sources of magnesium for protection against grass staggers in suckler cows.		
	Techni Paks		
NWF Beef Conc Techni Pak	An easy effective way of feeding your herds mineral and supplement requirements all out of one bag. Designed to be mixed with barley on farm the pak contains urea, minerals, protected fat and a rumen buffer		
	Molasses		
Molale	Highly palatable with high energy, used to improve intakes and digestibility of forages. Suitable for all feeding systems but not recommended for sheep.		
Potblack	A cost effective method of adding protein and sugars to rations low in protein such as straw, maize and wholecrop.		
	Grass Seed		
Champion	The ultimate proven ley for milk and meat production, very productive and flexible $5+$ year ley, suitable for cutting and grazing.		
Ultra longlife	A permanent pasture suitable for cutting/grazing, very successful on all types of farms.		

Also available: Protected Feeds: Ultra Pro R, Ultra Soy and Ultra Starch W Protected Fats | Rumen Paks and Buffers | Salts

Feeding with precision for profit



Precisely formulating rations to ensure cattle are being fed as economically and efficiently as possible sits at the heart of profitable herd. With efficiencies and cost savings at the forefront of beef farmer's minds, tailoring feed to suit a specific system or nutritional requirement is a constant and dynamic requirement.

NWF Agriculture has the ability to maximise production while minimising cost as a result of the large range of high-quality raw materials and feed supplements available. With so many variations of system, animal type and market requirements it is impossible to be specific and brief at the same time. However, regardless of those factors there are some points that are key to rearing and finishing cattle effectively.

GET A GOOD START – EARLY LIFE GROWTH IS KEY TO ACHIEVING A GOOD EARLY FEED CONVERSION EFFICIENCY

- Ensure sufficient colostrum intakes of good quality colostrum use a refractometer to determine a minimum of 50 IgG/litre.
- Whether your own or are buying in, check calves have a healthy dry navel, are alert and bright eyed and showing good confirmation.
- Achieve pre-weaning growth rates of at least 0.8kg/h/d.
- Encourage early concentrate intakes and always offer clean fresh water and chopped straw.

GUIDE TO GROWING: KEY POINTS

- Rearing growth rates should average greater than 1.0kg/h/d.
- Intakes will be relative to the animal's weight, approx. 2–2.5% liveweight.
- Recognise dam and sire breed to determine the potential frame and conformation, e.g.
 early maturing domestic breeds may require a longer growing period compared to a larger
 continental breed.
- Protein is required during the rearing period for metabolism and frame growth, particularly pre puberty. Typically, 15%–17% protein is required.
- Growing rations should be high in fibre, with moderate ME and starch. High levels of starch are not recommended as this can lead to unwanted fat deposition, especially in early maturing breeds.
- Ensure a good quality mineral is used to help energy metabolism, growth and vitality.

FUNDAMENTALS FOR FINISHING: KEY POINTS

- This period typically grows the final 100–150kg of weight on a significantly more concentrated diet.
- Finished growth rates should average greater than 1.2kg/h/d.
- Intakes will be relative to the animal's weight, approx. 2% liveweight.
- Dietary proteins can drop to approx. 12%.
- Rapid weight gain requires feeding high cereal-based rations, starch level must rise to a minimum of 20% but ideally closer to 35%.
- Ensure a minimum of 10% structural fibre is added to stabilise rumen function.
- Consider offering rock salt or a rumen buffer such as Sodium Bicarbonate or Acid Buf.

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NWF Agriculture has a comprehensive selection of feeds to suit your system

COMPOUNDS

NWF Calf Pellets

A high-quality starter pellet which is suitable from birth until weaning. Calf Pellets contains NWF Progress Plus, a comprehensive mineral and additive package.

NWF Super Rearer Nuts

A specialist rearer diet to maintain a high growth rate post weaning. The diet will compliment a straw or silage-based diet. Available in a 18% or 16% protein.

NWF Vital Rearer Nuts

A cost-effective rearing nut to compliment a straw or silage-based diet. Available in a variety of protein percentages.

Super Grower

A balanced 15% protein diet suitable for both growing and finishing, especially in early maturing breeds where a higher protein and slightly lower starch is needed for finishing.

*Also available with yeast at Wardle and Longtown.

Pedigree Beef

An intensive beef finisher diet, high in barley that helps promote growth.

*Only available from Wardle and Longtown.

Intensive Beef

An intensive beef finisher diet, high in barley that helps promote growth. Available with and without yeast.

*Only available from Wixland.

Goldstar Beef Plus

A 14% high energy maize based finisher diet containing yeast.

*Only available from Wixland.

Beef Concentrate

A urea-based concentrate designed to be mixed with cereal on farm at 3:1 or 4:1 to meet the desired protein for animals over 3 months of age. Contains triple minerals and yeast.



BEEF BLENDS

Cattle Rearer 16 & 18

Available as a 16% & 18% protein blend. Cattle rearer is an ideal first dry feed for youngstock, it contains an excellent balance of top-quality cereal, protein & fibre sources along with a high specification mineral & vitamin package to meet the needs of growing cattle.

Beef Grower B2

A 15% protein, cereal based blend, aimed at feeding semi-intensive beef systems where grass silage is the main forage source. This blend includes a range of high-quality raw materials including NWF Ultra Pro R (rumen protected rape meal) to ensure strong growth rates.

Beef Finisher B1

A high starch beef finisher diet aimed at intensive beef finisher units. Beef Finisher B1 blend includes high levels of rolled barley, wheat and maize to promote lean meat development and achieve excellent daily liveweight gains where rapid finishing is required. This blend can be fed ad lib but should be fed alongside good clean straw with fresh water to achieve maximum growth rates.

Amino Mix 34

A high protein blend concentrate designed to be mixed with processed cereal grains to create a balanced grower or finisher diet. Contains high quality protein sources including Hipro soya meal & NWF Ultra Pro R (rumen protected rape meal) to ensure the protein requirements of all cattle are met.

In addition to the NWF standard range of beef blends we can supply a bespoke blend to suit your system.

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Skylark Simmentals



Well Farm in Mid-Devon is home to a pedigree Simmental suckler herd of 100 cows plus followers. Rachel, her parents, and brother run a split calving system, calving 60 cows in the spring and the other 40 in early autumn.

In 1996, the first Simmental heifers were bought for their growth and dual-purpose ability. Over the years, the Simmental breed has remained, proving that they are more than suited to their system; achieving fast growth to finish at 13 months.

All calves are weaned at 9 months, with bulls and heifers being fed differently depending on their end purpose. Bull calves are kept entire and finished by 13 months, or kept for breeding. Bulls are fed a ration of NWF Beef

Concentrate and home-grown barley with great success. They find that the animals grow fast, achieving good killing out weights of 400kg, with 80% of grades at U+ and the top 20% come back as E's with fat grades of 2 and 3. Bulls kept for breeding stock are fed NWF Beef Concentrate and barley at a more conserved rate, producing a well-grown and well-fleshed animal whilst keeping in mind their internal development and feet.

The best heifer calves are kept for breeding stock, as replacements or sold at 12-16 months, as bulling heifers. The heifers are grass-based with a small amount of supplement feed to give them that extra "spark". Heifers which do not meet the standard are sent to slaughter. Heifers grade mainly at U's, with a handful of R's with fat grades of 3's and 4L's, meeting the

high-demand markets. Well Farm are "delighted" with how well they grow; strong and fit to be put to the bull at around 14 months to be calved down at 2 years old, a benefit to suckler herds.

Rachel emphasised the importance of growing animals which are "fit for purpose and not pushed too hard, particularly bulls, which can then have longevity issues, not to mention poor foot health as foot growth tends to get left behind."

Showing Insight

All calves are registered, keeping a close eye of family lines that have been proven in the past. When the calves are 4-5 months old, you start to see the potential show stock. At weaning, the potential show calves are grouped, allowing them to get used to being handled and to start building that relationship.

Halter training starts at 9-12 months old and then again 3-4 months before the show season. The family also make sure the cattle are exposed to distractions which they may come across on show day; the radio is played in the shed, plastic bags are hung on gates and a volunteer is also asked to ride a bike past the cattle.

Skylark Geronimo was the the first bull showed by Rachel, he went to two shows before being sold and then winning the Simmental Champion at Royal Cornwall. Last year, Skylark Jim Bob won the Junior Interherd Reserve Champion Bull at Devon County Show.

The Future

Over the past 10 years, the family have selected bulls for fast growth and high milk yields, continuing this focus on genetics is key for Skylark Simmentals. Rachel will continue to promote the breed "They are a pleasure to work with; their docile nature, maternal instinct, milkiness and calving ability makes them so versatile to a variety of systems."

The family's NWF sales representative Philip Kingsland says, "The herd at Well Farm is a credit to the family's attention to detail and passion for producing high-quality stock."

NWF Agriculture would like to thank Rachel from Skylark Simmentals for the insight about the family's pedigree Simmentals herd.



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Managing Acidosis for Improved **Finishing Performance**



Data shows a 5% improvement in both growth rate and feed efficiency when replacing sodium bicarbonate with Acid Buf, the change also reduced bloating, lameness and aggressive behaviour. The trial was carried out over 130 days using 126 Charolais bulls, growing from around 530kg LW to finishing at 750kg LW. Cattle were housed in pens of seven and fed an ad-lib mixed ration based on maize silage and brewers' grains for the duration of the trial.

The ration fed to half the pens contained 80g/head/day of a standard sodium bicarbonate rumen buffer, whilst the others received 40g/head/day of Acid Buf. The aim was not only to assess any improvement in feed efficiency and growth, but also to evaluate the potential impact on the typical problems associated with intensively finished cattle. When completed, the trial showed that although average feed intake across the trial remained the same for both groups, there was a significant increase in average daily gain from 1.576kg/day to 1.657kg/day for cattle receiving Acid Buf. As a result, feed conversion ratio (FCR) - measured as the kg of feed required to produce one kg of weight gain – improved from 7.36 down to 6.98. No differences were recorded in carcass weight, confirmation, fat score, or killing out percentage.

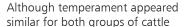
	Sodium Bicarbonate	Slow Release Conditioner	Difference
Liveweight gain (kg/day)	1.576	1.657	+81g/day
Dry matter intake (kg/day)	11.51	11.52	ns*
Feed conversion ratio	7.36	6.98	-0.38
Bloat incidence	1	0	-1
Cases of lameness	5	1	-4
Aggressive behaviours	7	2	-5

Table 1 – Impact of Acid Buf on beef finishing (Source: AB Vista, 2016)

A 81q/day increase in growth rate for no extra feed intake – or higher cost for the addition of Acid Buf due to the lower feed rate, provides a substantial 5% gain in performance. Potentially, this could allow cattle to be finished up to 7-10 days earlier. This would reduce feed consumption for the finishing period by 5-8%, along with allowing more cattle to be finished each year.

The gains in performance come from a more efficient rumen fermentation, the direct result of an improved rumen pH, although sodium bicarbonate has been used to control rumen acidity for many years, it's now known to achieve this by increasing rumen outflow rates, thereby reducing starch availability in the rumen and damaging feed efficiency. Faeces evaluation highlighted that Acid Buf clearly demonstrated improvement in feed efficiency as more faeces passed through to the bottom sieve. Highlighting that rumen conditions were more favourable and led to better rumen fermentation.

Controlling rumen pH and preventing acidosis is particularly important when feeding high starch and high potential acid loading finishing rations, and the gains in feed efficiency can be substantial. Just as important are the reductions in bloat and lameness, both of which reduce performance and increase costs, whilst a lower incidence of aggressive behaviour can help lift growth rates by cutting wasted energy and stress.



during handling, observing behaviour in the pens and noting incidence of fighting and mounting did highlight a difference. By day 120 of the trial, the 63 cattle receiving Acid Buf showed clear signs of reduced aggressive behaviour, with just two incidences of fighting or mounting during the two hour observation period, compared to seven in the cattle fed sodium bicarbonate. This change in behaviour matches anecdotal evidence from use of Acid Buf on-farm. It occurs because of the bio-available magnesium in the conditioner, which likely has an overall calming effect on the cattle.

Taken together, these improvements can add up to a substantial lift in feed efficiency, margin per head and overall beef unit profitability. Given the current pressure on margins, it's a potential increase in performance few can afford to ignore.

Written by Kayley Barnes, Technical Manager at AB Vista.



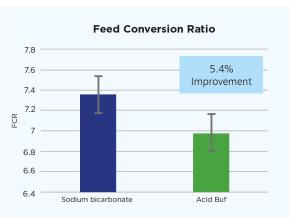


Figure 1: Difference in weight gain (Kg) and FCR between the sodium bicarbonate and Acid Buf treatments in a study carried out on 126 Charolaise finishing beef cattle (2016).

0800 756 2787



Cogent's Beef Programme Manager Boomer Birch highlights the importance of a selective breeding policy and how bull selection can shape the future of your 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.

Breeding for a specific target market

In order to maximise their financial returns, beef producers need to produce and sell the type of finished cattle markets really want and are willing to pay the most money for. Identifying a target market is the key to successful cattle finishing. Then the task is to produce cattle to meet their specific needs as cost-effectively as possible.

Both suckler farms and dairy herds utilising beef x dairy across the UK have a variety of end markets that they supply. Whilst in the past each of those had very different selection criteria, they have now become very similar, meaning that the end product now fits all markets.

As a producer you have to consider the market that you are supplying but you must also take into account the production system you are working with. The terminal and maternal traits of that calf will need to be different depending on what we want it to do and what will be the most profitable for your farming system. Identifying the requirements of your market and, subsequently, what the calf needs to do to maximise profit at different stages of production is an essential first step to choosing a bull to breed your cows with.

Once you've identified the requirements of your market, think about which areas you are fulfilling and which areas you need to improve on, using genetics as one of the tools to get you there.

Which traits should you be looking for when breeding pedigree beef bulls?

Estimated Breeding Values (EBVs) are measurements of genetic potential, which can be used to assess a bull's breeding merit for a specific trait. The accuracy of an EBV ranges from between 40% and 90%.

CALVING EASE

Look for positive calving ease figures (Top 10% and above in the breed) and negative figures for birth weight and 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 and excellent growth and carcase trait EBVs.

GROWTH / 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 in a 300 kg carcase. Depending on market targets, larger more positive values are generally more favourable.

Developments in beef production from the dairy herd

Approximately 50% of all beef in UK is a product of the dairy herd, and it is only 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.

For many dairy herds, incorporating better beef sires into the 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 Estimated Breeding Value (EBV) beef sires on the rest to produce beef-cross calves of greater economic value. For beef rearers, growers and finishers, it is important to source cattle with good EBVs in order to maximise growth rates and carcase quality. Breeding is not the only critical area for cattle in the dairy beef supply chain.

For more information contact Cogent Freephone: 0800 783 7258 Email: info@cogentuk.com

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Benefit to Beef Diets: Yeast

Driving for feed efficiencies is essential in growing and finishing systems where attention to detail is required to optimise cattle feed intakes. Any efficiency advancements gained from management, feed or genetics, will result in a more profitable system.

Oxygen, fermentation acids and excess starch and sugars can drop rumen pH and cause incomplete digestion. Beef animals can be at particular risk, especially those on intensive cereal rations commonly seen in the UK.

It is important to note that there are many influences on feed efficiencies which include nutrition, handling, housing, and genetics. With a focus on nutrition; adding a live yeast such as Yea-Sacc® can help unlock efficiencies through the secretion of peptides that stimulate the "good" bacteria in an animal's rumen, helping to remove excess acid produced, stabilise rumen pH, and to enhance feed digestion therefore increasing efficiencies.

Consistent results from extensive research has highlighted that an inclusion of a live yeast (Yea-Sacc®) can increase average daily gain and increase killing out percentage, both of which are driven by the increase feed efficiency reducing the number of days taken to reach slaughter. This can all have a subsequent positive impact on gross margin.





MORE EFFICIENCY +8% FEED EFFICIENCY



INCREASED
KILL OUT %
+2% KILL OUT

Research from Harper Adams University, Teagasc Research Centre and Institute for Ruminant R&D

Compounds	Blends	On Farm Paks
Beef Concentrate Super Grower Plus* Goldstar Beef Plus*	Addition of Yea-Sacc® into blends	Stable Rumen Yea-Sacc® Farm

^{*}Available from designated sites, refer to page 10

For more information on yeast in beef diets or for any aspects of your beef system, speak to your local NWF Sales Specialist, or call 0800 756 2787.

LINSCOTT'S RUMEN SCORING TRIAL

Conducted with 80 continental cross-bred steers, the trial looked at the effect Yea-Sacc® supplementation would have on performance, by feeding a high starch diet either with or without 50g/h/d of Yea-Sacc®.

The photos speak for themselves, showing a significant difference in the rumen environment, the development of rumen papilla, which subsequently contributes to the efficiency of production with lower feed costs, less time on farm and increased margins.





Rumens of beef animals which had the 50g/h/d yeast within their diet





Rumens of beef animals which had no yeast supplementation

"Yea-Sacc® FarmPak effects on performance, carcass characteristics and rumen epithelium of steers." Andrew Linscott1, Graham Smith1, Nick Adams2 – Alltech UK1 / Dunbia2 (2016)

What differentiates Yea-Sacc® from its competitors?

Points of differentiation include:

- Mode of action: Competitors act only on reducing lactate or increasing fibre digestion;
 Yea-Sacc® does both.
- Peer-reviewed research supporting beneficial effects (47 percent of all yeast research has been done using Yea-Sacc® 1026).
- Lower inclusion rates.
- Performance results (+1.6 litres of milk, +5 percent feed efficiency, +12 percent average daily gain [ADG]).

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At NWF we know the importance of **Hydration** and **Gut Health**

Calf Renova



Calf Renova is an easy-to-use bolus containing a source of natural ingredients. The bolus includes a botanical extract, naturally occurring microorganisms (Direct Fed Microbials (DFMs), and yeast fermentation products. Calf Renova provides intestinal support through beneficial bacteria and plant extracts as an effective intervention for diarrhoea.

Features and Benefits

- Contains a specifically selected hind gut DFMs (probiotic)
- Essential Oil as a natural antioxidant
- Offers a natural antimicrobial effect
- 12 boluses per pot

NWF Calf Milk Replacer

The NWF calf milk replacer range is formulated to provide outstanding nutrition using high quality, traceable ingredients to ensure digestibility and palatability.

- Carefully selected milk solids with maximum nutritional value.
- A balanced blend of oils homogenised and emulsified for maximum digestibility and normal gut function.
- Full supplement of vitamins, minerals and trace elements.
- Selected additives to help meet growth rates and support the health status of calves.
- NWF milk replacers are easy-mixing and suitable for most automated and manual feeding systems.
- All NWF milk replacers are fixed formulation, to supply a consistent product.

Contact your local NWF Sales Specialist or a member of the NWF Youngstock team for more information on the comprehensive NWF Milk Replacer range. CALF MILK REPLACER

Enquiries: **0800 756 2787** | Orders: **0800 262397**

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